JULY 2024 VOLUME 21 ISSUE 7

THE LOGGER'S BARK

a magazine

Radio Club of Tacoma

16-yo member Nathan KK7QND
with visitor Jordan W3NTA
at the 40-meter Flex station

New Xiegu *X6200* p. 86

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Cover photo
Dave W7UUU

Radio Club of Tacoma
1249 South Washington Street
Tacoma, WA 98405
253-759-2040

Open House every Saturday
10:00 AM to 2:00 PM
Last Saturday every month is
Swapmeet Day

W7DK 2024 Officers and Committee Leaders

Executive Committee:

President:	Mike Mikuchonis W7XTZ
Vice President:	Adam Barbera W2NCC
Secretary:	Gary McAdams WG7X
Treasurer:	Steve Dightman AF7YD

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Board:	Mike Drorbaugh W7MKE
Board:	Paul Matney W7PFU
Board:	Doug Schafer AB7DG
Board:	Red Cranefield WB7EC
Board:	Phil Pia K7PIA

Key Committee Chairpersons:

Membership:	George K7GRS/Mike W7XH
Salmon Run:	George K7GRS/Mike W7XH
Infotech/IT:	Randy WB4SPB
HF Operations:	Phil K7PIA
Facilities:	Adam W2NCC
Property Mgmt.	Red WB7EC
Museum:	Dan KD7SV
Planning:	Manny AD7MA
POTA:	BJ WA7WJR
General Meeting:	Dave W7UUU
Bark layout & Editor:	Dave W7UUU
Assistant/Copy Editor:	Anne N7ANN

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But don't stop there! Each issue is 50 or more pages of fun and cool stuff to explore! Scroll on!

Have a submission for our next issue?

loggersbark@gmail.com

PRESIDENT'S CORNER

Monthly ruminations from our President

Mike Mikuchonis
W7XTZ

RAMBLINGS OF A MAD MAN!

I was thinking about transitions recently after I learned about the passing of long time member Bob Hewlett N7NCP. With older club members passing, a knowledge base of "old time" radio operating goes with them. That's one of the reasons I like chatting with members at the clubhouse to find out what was happening in their day… how they got around to getting on the air and making contacts without some of the equipment that we have these days and often take for granted.

I encourage everyone to have a conversation or two with our members at the clubhouse, eat a doughnut and drink some coffee! Most are more than happy to share stories and their knowledge. Who knows? You might pick up some valuable information along the way that will help you.

A little blurb about the SEA-PAC hamfest in Seaside Oregon [write-up and photos on page 73]: I saw several Mighty DK club members. Adam W2NCC & Mike W7XH had a personal "for sale" table as well as one for the club. I think they said while they didn't sell everything that it was worthwhile to have a presence.

Always fun to meet operators and vendors from around the country. I even met an op from the Netherlands…. eyeball QSO DX right there!! There was also a Ham from Great Britain just down the table at the banquet. Of course, there were several from our neighbors up North in Canada which is always nice to see.

When this newsletter is published, Field Day 2024 will have come and gone. A lot of people come to operate, share a cookout meal, and socialize—but there is a core group of our club members that do a lot of prep work behind the scenes before it happens. So here's a "Big Thank You" to those that prepare, sometimes months ahead of time, so we can make contacts and have a lot of fun. Remember, *it's not a contest* (cough cough!).

Something new: We are now having our general membership meeting the second Saturday of the month at the Eagles Club located at 7037 South Pine Street in Tacoma beginning at 1:00 p.m. If you want lunch or a beverage you can come at Noon. If you can't attend in person Zoom is still available, so see the club's home page for how to attend. But it's pretty much the same process as during the pandemic, just a different venue for the in-person portion of the meeting.

Well, that's all the rambling for this month. I hope all is well with you and yours. See you at the clubhouse or our meeting.

73 de Mike W7XTZ

FROM THE DESK OF THE VP

Insights from our Vice President

Adam Barbera
W2NCC

HELLO ALL—THIS MONTH'S TOPIC: GMRS—A Gateway to Ham Radio.

Amateur Radio attracts people through various experiences including personal connections, emergency preparedness initiatives, and independent discovery. But there's another entry point to these same interests: the General Mobile Radio Service or GMRS. This is another significant entry point that often leads users to Amateur radio due to its widespread use for everyday communication.

GMRS appeals to many due to its easy licensing process, which does not require passing a test. This convenience makes GMRS a preferred option for those seeking to get involved in two-way radio communication without deep technical knowledge or testing. Not having to pass a test simplifies the entry process, providing immediate access to a reliable communication system without significant barriers (other than the limited range of GMRS vs. HF amateur radio).

Wouxun KG-1000G GMRS

The similarities between GMRS and Ham Radio are numerous, providing a smoother transition for GMRS users to ham radio. GMRS licensing simply requires registration with the FCC, including obtaining an FRN number, paying a $35 fee, and receiving a computer-generated call sign. The license is valid for five years. Using GMRS radios enhances on-air communication skills, such as voice clarity and good transmission practices, which are crucial in ham radio operations.

GMRS users gain familiarity with proper radio protocol, including initiating calls, handling interference, knowing when to maintain clear channels, and identifying their station when transmitting as per FCC rules. Exposure to GMRS radio transceivers, accessories, and antennas provides a foundation for transitioning to more advanced ham radio setups.

Recently, I installed a GMRS radio, specifically a Wouxun KG-1000G Plus, at the W7DK clubhouse to educate members about GMRS, given its higher user traffic compared to many ham radio HF and UHF repeaters. One of the goals of this is to encourage GMRS-licensed hams to *engage with this community*. There is an opportunity to assist those interested in broadening their wireless experience to join the ranks of the amateur radio community.

In conclusion, GMRS serves as a valuable gateway to Ham Radio by equipping individuals with foundational knowledge in technical operations, communication skills, protocol practices, equipment familiarity, and FCC rules compliance.

In my personal experience, GMRS users who transition to Amateur Radio are more likely to purchase radio equipment and actively use it to get on the air and communicate, compared to technician-licensed hams who have no prior radio experience, who encounter repeaters that are often silent these days. It is beneficial to work more closely with this community encouraging them to transition to Amateur radio. Until next month, thank you.

-Adam W2NCC

SECRETARY'S REPORT

W7DK Secretary—Gary WG7X

PARTICIPATION: DO YOU KNOW ***HOW TO DO IT?***

By the time this is published, our premier radio activity at W7DK, Field Day, will be in the record books. Hopefully, a lot of people will have participated in this event. When I say "participated" I mean everything from planning, testing equipment, setting up that equipment, or support stuff like antennas, tents, and everything necessary to having a good field day—and yes, that includes coming out to the site and operating or just visiting.

It all counts and sometimes just being there is enough.

That said, I'd like to mention another type of "participation" that is showing up in the club lately, and that's participating by *complaining* about something or other to the President, the Executive Officers or the Board of Directors (BOD) without having any plan to actually implement solutions to address or solve their complaints or suggestions.

This is nothing new. When I did my stint as President, we had the same thing going on and I usually just asked the complainer if they would like to be the chair of a committee that would investigate the "problem" and submit a plan to the BOD to address and solve that problem. I can state with fair conviction that most of the time, *no one* took me up on that request.

Lather, rinse, repeat

Now to the present day. We again have some members making suggestions about things that they think need fixing. Some of these suggestions have merit, some don't, but again the suggestion makers don't follow through with a workable solution for the Board of Directors to consider.

Folks, please don't stop making suggestions to the BOD on things that you consider important; that's what the BOD is for. Come to the BOD meeting and state your case with solutions that the BOD can consider, and accept or reject their response.

Sending emails here and there seems OK at first, but it does not beat *appearing in person* to state your claim.

Emails are easy to ignore; folks appearing in person at a meeting are not going to be ignored, so show up occasionally if you wish to be *taken seriously*.

Now, I can already hear the objections: and yes, some of our members are not able to show up in person for various reasons, that is correct, but I think that a solution should still be offered to the BOD when sending emails. Like this:

"I think something should be done about: __________

Here are my thoughts and ideas on how to achieve this goal: ____

Here's what *I'm willing to do myself*:________________"

All ideas and suggestions will be given *due consideration* and answers will be given to the original person who made the suggestion. But be careful: you *might* be, and probably *will* be, asked to carry out your own suggestions by doing the required work to make them happen!

Remember: We're all volunteer workers and we try our best to do things correctly, but some folks are making the whole thing much harder than it needs to be.

-73 Gary WG7X, Secretary, W7DK

W7UUU FROM THE EDITOR'S DESK

THIS MONTH I wanted to answer some questions I've been asked recently regarding the mechanics of publishing *The Bark*. They have to do with the Table of Contents, and the many hyperlinks (the things you can click to take you to other places on the web) that appear in each month's issue. This ties in with questions received from a number of readers.

The software we use for creating *The Bark* is called Microsoft Publisher (365 version, fully up-to-date). But despite being current, there are features that are oddly outdated despite the 30-plus years this program has been supported.

For starters, unlike MS Word and many other similar programs, there's no auto "Table of Contents" (TOC) generator, where you simply name the pages and no matter where they end up nor how long the article may become, the TOC rebuilds itself to always link to the right place. Publisher completely lacks that. So the TOC tables must be built by hand, page link by page link, which is tedious and thus *very* error-prone.

The larger the TOC, the more likely errors will occur as editing progresses. That's why *The Bark* has no *master* TOC, but rather just a cover TOC and Masthead page TOC.

The second really annoying lack of function of MS Publisher is how the software handles hyperlinks. Virtually ALL modern publishing software allows the designer to assign "targets" to the link such as "open in new window" and "open in a new tab". That way when the user clicks a link, they don't lose their place in the source document. Alas, as many readers have discovered, if you just click a link in *The Bark*, sure—it will open. But when you click "back", you're sent right back to the home page, not to where you were reading.

So here's the "pro tip": whenever you see a link inside an article (not a TOC link—we'll cover that next), use *RIGHT CLICK* and then select *OPEN IN NEW WINDOW* or *OPEN IN NEW TAB*. That way, the link will open fine but leave your place in *The Bark* intact. It's very easy to do—you just need to remember to do this.

But this trick won't work on Publisher's "within document" links like the front cover or masthead page TOC links. Those links will certainly take you to that page, but unless you click the "back" button on your browser, you have to scroll back to the top. Many users don't know that clicking "back" does that, and have expressed frustration with using the scroll wheel to get back to the cover TOC. So starting with this issue of *The Bark*, you will now see a blue button at the bottom of most pages that reads

W7UUU

FROM THE EDITOR'S DESK

"Return to Home Page" - so when you reach the end of a page, just click the blue button and you'll go back to the front page of *The Bark*, and can launch into your next article.

So try it! Click the blue button now!

RETURN TO HOME PAGE

Of course, you'll want to come back to page 7 to finish this article, but at least you got to the TOC faster than scrolling up! Yeah even in 2024, that's about all MS Publisher has to muster regarding links and tables of contents— but given that Adobe InDesign (the standard platform for magazine publications these days) is hundreds of dollars per year, the club won't be updating any time soon.

In other news, you'll notice that starting with last month's issue, and continuing on to this issue, we're finally seeing some "letters to the editor", as well as some nice comments from the QRZ users. It's very satisfying to see the activities of W7DK being seen and appreciated by hams not just in our own local community, but also around the world!

As most should know, every month there is a "hidden word" and "guess the mystery member" contest of sorts. The first to correctly answer the mysteries receives a QRZ sticker or two in the mail.

But we've now had not one, but *three* responders from out of state get the guesses right! Jim KA7SSR in Pleasanton TX actually figured out it was your Editor, W7UUU, as the Mystery Member last month (based on pictures he's seen of me on QRZ). And Bruce KG7RKE from Las Vegas got the "hidden word" is the second. Third is Ronnie NZ4X from Naples, Florida. Of course not all were first, but they still got stickers for being "Contest DX"!

Turn to page 15 & 16 and see photos I received back from them proudly holding their prizes so they could share with the folks back home at the Radio Club of Tacoma. It's nice to see hams from across the country having fun with the content of *The Logger's Bark*!

That's it for this month—I hope all are well, and as always, keep reading *The Bark* and "keep the cards and letters coming" as they used to say.

-Dave W7UUU, Editor

MEMBERSHIP REPORT

Mike W7XH, Membership Chairman

HELLO EVERYONE—NEW MEMBERSHIP LEVELS ARE HERE!

I know that it is a bit early to hear from me, as our main fundraiser for the year (Salmon Run) is still several months away.

But I would regret not bringing it your attention! So listen on the weekly 2m Club Net, and join us on Groups.io , on Discord and our Facebook page for Salmon Run news. I know that you will get information here in *The Logger's Bark* as well.

And no, membership renewals have not begun yet either, but will of course be coming soon.

But for this month's announcement, I wanted to point out a very recent change in our membership form. The Radio Club of Tacoma Board of Directors has decided, after some discussion, that our associate membership classification would change effective immediately.

In the past, this class of membership was for an *un*licensed individual, of any age , to be granted without club voting privileges, from anywhere—not just local to the clubhouse. The annual fee was $35.00. We have now amended the existing associate class, and added a *second* associate membership:

Associate 1 is for an unlicensed individual *within* Washington state, without voting privileges, and with an annual fee of $20.00.

Associate 2 is for a licensed *or* unlicensed individual, without voting privileges, from anywhere *outside* of the state of Washington, with an annual fee of $20.00.

We have several members outside the state of Washington, with more now requesting information about out-of-state membership fees.

Our current members can opt to pay for an associate membership to save the funds, or they can remain full members and *retain voting rights*.

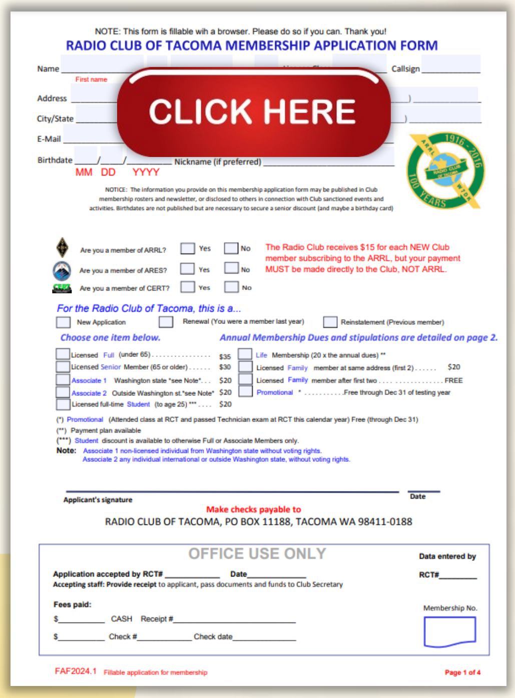
Of course, anyone wishing to support one of the oldest radio clubs in the nation (founded October, 1916) and support the work we provide to the amateur radio community, we are happy to have you come alongside the Radio Club of Tacoma.

I personally am a member of *three* radio clubs. The farthest away is in the state of New York. So there's certainly no reason the Radio Club of Tacoma can't happily welcome members from virtually anywhere.

Our monthly meetings are held on the second Saturday of each month in a hybrid fashion (in person at Eagles Aerie #2933, 7037 South Pine Street, Tacoma WA) as well as on Zoom—with login details at www.W7DK.org under "Meetings".

In closing, I'd like to thank all of our members for their support and generosity in helping us keep our clubhouse state-of-the-art and in good repair, and as a wonderful meeting place for hams not only in person but via our monthly Zoom hybrid club meetings as well. Please reach out to membership@w7dk.org for any questions concerning membership or fees. 73

-Mike Isakson W7XH, Membership Chairman



NOTE: This form is fillable wih a browser. Please do so if you can. Thank you!

RADIO CLUB OF TACOMA MEMBERSHIP APPLICATION FORM

Name ______ Callsign ______
First name
Address ______) ______
City/State ______) ______
E-Mail ______
Birthdate ____/____/______ Nickname (if preferred) ______
MM DD YYYY

NOTICE: The information you provide on this membership application form may be published in Club membership rosters and newsletter, or disclosed to others in connection with Club sanctioned events and activities. Birthdates are not published but are necessary to secure a senior discount (and maybe a birthday card)

Are you a member of ARRL? ☐ Yes ☐ No
Are you a member of ARES? ☐ Yes ☐ No
Are you a member of CERT? ☐ Yes ☐ No

The Radio Club receives $15 for each NEW Club member subscribing to the ARRL, but your payment MUST be made directly to the Club, NOT ARRL.

For the Radio Club of Tacoma, this is a...
☐ New Application ☐ Renewal (You were a member last year) ☐ Reinstatement (Previous member)

Choose one item below. *Annual Membership Dues and stipulations are detailed on page 2.*

☐ Licensed Full (under 65) $35
☐ Licensed Senior Member (65 or older) $30
☐ Associate 1 Washington state *see Note* . . . $20
☐ Associate 2 Outside Washington st.*see Note* $20
☐ Licensed full-time Student (to age 25) *** $20
☐ Life Membership (20 x the annual dues) **
☐ Licensed Family member at same address (first 2) $20
☐ Licensed Family member after first two . . . . FREE
☐ Promotional * . . . . .Free through Dec 31 of testing year

(*) Promotional (Attended class at RCT and passed Technician exam at RCT this calendar year) Free (through Dec 31)
(**) Payment plan available
(***) Student discount is available to otherwise Full or Associate Members only.
Note: Associate 1 non-licensed individual from Washington state without voting rights.
Associate 2 any individual international or outside Washington state, without voting rights.

Applicant's signature ______ Date ______

Make checks payable to
RADIO CLUB OF TACOMA, PO BOX 11188, TACOMA WA 98411-0188

OFFICE USE ONLY
Application accepted by RCT# ______ Date______
Accepting staff: Provide receipt to applicant, pass documents and funds to Club Secretary
Fees paid:
$______ CASH Receipt #______
$______ Check #______ Check date______
Data entered by
RCT#______
Membership No.

FAF2024.1 Fillable application for membership
Page 1 of 4

Whether you're local or from across the globe you are welcome to join our club! Click the image to download the application form

AMSAT MAIL ALIAS SERVICE ends August 1, 2024

A long standing member service, the AMSAT Mail Alias Service is scheduled to end on August 1, 2024. A mail alias on AMSAT.ORG permitted people to send an email to members without knowing their actual internet email address. They just needed to know their amateur radio callsign.

Unfortunately, the unchecked rise in domain name hacking and email account high-jacking has made it impossible to sustain this service at a cost-effective level. The number of callsign@amsat.org email accounts that had been hijacked and converted to zombie spam accounts over the years had led many internet service providers and gateway centers to ban all @amsat.org email addresses, including those business accounts of AMSAT officers and officials. The tireless efforts of AMSAT's all-volunteer IT staff has worked for years to repair much of the damage, but AMSAT still gets complaints from members who are not getting their personal emails, ANS bulletins or AMSAT-BB posts because of persistent delivery problems.

It has come to the point where the AMSAT volunteer IT staff can no longer keep up with the maintenance requirements to keep the alias mail list clean and to work with email gateways to remove blocks. And, after considerable investigation into alternative paid email services, AMSAT leadership decided that the money required to keep an email alias system alive would be better spent on building and flying satellites for its members.

Persons using the Mail Alias Service should begin to migrate to different email accounts so they do not lose receipt of personal emails, AMSAT News Service Weekly Bulletins, AMSAT-BB posts, or official messages from AMSAT itself. Members are especially asked to make sure they are NOT using a callsign@amsat.org as their registered email address in the AMSAT membership portal. Members can easily change their registered member email address by logging into the portal and updating their profile.

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HAM RADIO WORLD NEWS

Amateur radio events from around the world

W7UUU

WARSAW UNIVERSITY OF TECHNOLOGY students plan to launch third satellite in 2025

Students from the Warsaw University of Technology have been working on the third in a series of nanosatellites, which they plan to put into space in the fall of 2025.

University of Krakow team was victorious at The International Mars Rover Competition.

The launch was originally scheduled for this year, but was delayed due to the COVID-19 pandemic. Members of the Students Space Association of the university's Faculty of Power and Aeronautical Engineering successfully put the first Polish satellite, PW-Sat, into orbit in 2012. This feat was followed in 2018 by the launch of PW-Sat2.

A team member works on the satellite's predecessor, PW-Sat2. Photo: [LINK]

Now PW-Sat3, a cube satellite, is intended to continue the work of its two predecessors. Its purpose is to test the drive that enables maneuvers within orbit and solutions for avoiding space junk.

"The goal of our mission is to test the Warm Gas drive, which will allow us to deorbit the satellite," team member Jakub Murawski said. "The satellite control algorithm prepared by our team is also very important. Thanks to it, we will be able to perform several maneuvers in orbit, [and] change it, which will help us avoid space debris, among other things."

PW-Sat3 will be larger than the previous two nanosatellites and will feature a camera for imaging Earth and a horizon sensor making it possible to determine the satellite's position. It will also have a radio capability.

"As in the case of PW-Sat2, we want our satellite to make a contribution to the development of the amateur radio community around the world," Murawski said. "We plan to make data from the transponder and/or the possibility of downloading additional data publicly available."

Source: TVPworld.com

ARRL NEWS & VIEWS

What is the League up to this month?

AMATEUR RADIO CONNECTS Family Members During Utah Boating Emergency

On June 5, Isaac Stiles, KJ7FAY, and his 3-year-old son were involved in a boating accident. Their canoe had tipped over at the Lost Dog Confluence to the Flaming Gorge Reservoir. The initial emergency call was made by Stiles' wife, Kendal. She had to drive to nearby campsites until she found someone with a phone and then made the call to the Green River Fire Department (GRFD). She told them the pair were in the water but could not be seen or found. Emergency responders rushed to the scene.

The fire crews were able to find Stiles and his son on the opposite side of the river. They were rescued by a Sweetwater County Sherriff's Department boat. Stiles' son needed ambulance transportation to a waiting Air Med Helicopter, which would then take him to Primary Children's Hospital in Salt Lake City.

Stiles said that once his son was loaded into the ambulance to meet the helicopter, he needed to call his mother to take care of his other son...but there was no cell phone service. So, he tuned on his mobile ham radio to a local repeater and was able to reach Zach Gunyan, KE7WYG.

Gunyan made telephone contact with Stiles' mother and relayed critical information. He also went a few steps further and stayed on the phone to help calm and assure Mrs. Stiles that everything was going well. He took the rest of the day off from work, kept monitoring the repeater until Stiles was back in the area, and then went to the scene of the accident to help recover the boat and equipment.

After the telephone conversations with Gunyan, Mrs. Stiles thanked him for his help, to which he replied, "This is why I originally got into ham radio, to help just one person in an emergency."

Stiles had a hard time finding the words to thank Gunyan. "He's always been a dependable person and helped in many amateur events," said Stiles. "We are fast becoming good friends!"

Gunyan said he keeps his radio on most of the time, except when he is moving between locations and servicing computer networks. "I lose signal as I move from building to building," said Gunyan. "But on the day of the accident, I just happened to be at the right place, where I could hear the call for help."

Stiles' son is now out of the hospital and on track to make a full recovery.

Gunyan is an ARRL member and the current president of the Sweetwater Amateur Radio Club (SARC). He is an Emergency Management volunteer with the Sweetwater County Sheriff's Office. Stiles, secretary of the SARC, is now working on a way to recognize Gunyan for his efforts during the accident.

Article ©ARRL

Original Source

ARRL NEWS & VIEWS

What is the League up to this month?

W1AW

ARRL TEACHERS INSTITUTE Kicks Off Summer Cohorts

06/14/2024

Teachers are gathered from around the United States to learn about amateur radio, and how to use it in their classrooms as part of science, technology, engineering, and mathematics (STEM) education. The 2024 cohorts of the ARRL Teachers Institute (TI) on Wireless Technology have begun.

The first group members for the year are each returning teachers participating in the second round of learning, TI-2. “TI-1 was an amazing, immersive experience that broadened my knowledge of wireless technology, electronics, and amateur radio. I implemented ideas and applications from the very first day of the workshop within the first week of my return to school,” said Everton Henriques, KD2ZZT, a teacher from Staten Island, NY. “Attending TI-2 would further invigorate my teaching practice and allow us to do more cool projects,” he continued.

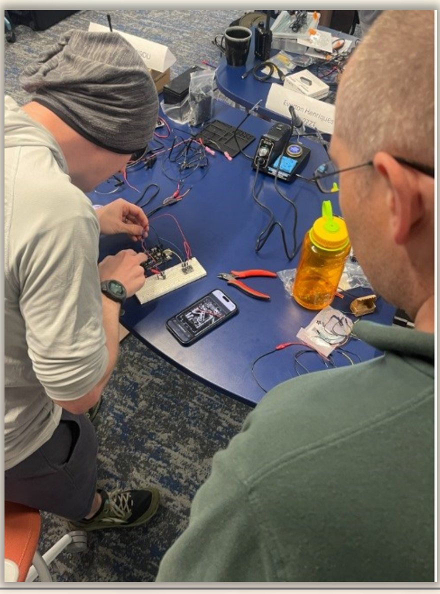
TI-2 takes things a step further from basic radio principles. “It builds on what they learned the previous year and really exposes these teachers to advanced remote-sensing technologies,” said ARRL Education and Learning Manager Steve Goodgame, K5ATA.

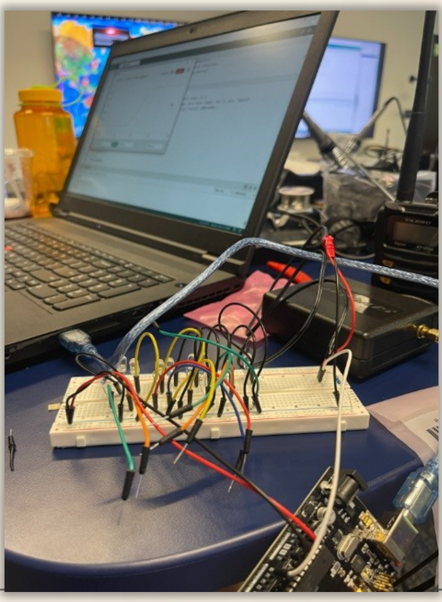
TI-2 also includes a demonstration of telemetry data gathering from amateur satellites, basic amateur satellite operation, and a discussion of applications of the satellite data to math and science topics. TI-2 participants will also learn how to do Arduino programming and remote sensing.

"The ARRL Teachers Institute is easily one of the best classes I have ever taken. The hands-on projects were phenomenal, and everything I learned in TI-1 was useful with my club and in the classroom. TI-2 is raising the bar, and I already have a ton of ideas for things I will do next year based on this course. I am deeply grateful to ARRL for this opportunity," said Dr. Chris Brown, W9SBS, of the Alabama School of Cyber Technology and Engineering.

The ARRL Teachers Institute on Wireless Technology is funded entirely by donors through the ARRL Education and Technology Program. Learn more at www.arrl.org/ti. There are seven TI cohorts this summer. It costs teachers a $100 application fee to attend. All travel, lodging, and other costs are covered by the generous donors.

Article & Photos ©ARRL … Original Source





MEMBER SPOTLIGHT

By W7UUU

Gary McAdams, **WG7X**

Anyone who has been around the Radio Club of Tacoma for any time at all has surely met up with Gary WG7X! Member #1249, he joined the club back in August of 1987 and has been involved ever since… President in 2011, 2012, 2013, 2014, 2015, and 2016! He's held many Board positions, been the Logger's Bark editor many years, and many other roles. Truly one of the Pillars of the Order.

THE MAILBAG

Dear Editor,

Thank you again for another great edition of the Logger's Bark.

As a newer member, I wanted to share what I learned this week… that the RCT has a membership directory available on the W7DK website once you sign in. Now I can contact fellow members directly, without bothering you!

73

John - KJ7SJM

Thanks, John for the kind words. And a big round of applause to Randy WB4SPB, the W7DK IT guy for making nice improvements on how to access that -ed.

Dear Editor,

Your newsletters are top notch! I noticed your very nicely done newsletter. Could you tell me what blog or web tool you are using to produce with it?

73,
Jim K0MHC

I use MS Publisher Office 365 edition but most any version from 2007 on can do what this does. The differences are subtle over the years. MS doesn't really add or improve Publisher anymore over time—they just fix a little thing here or there. So most anyone with Publisher 2007 or newer can produce a magazine like this with minimal effort -ed.

From QRZ,

Dave that's something beyond a "newsletter". Lots of cool stuff. I'm in Lacey [WA] and may just have to drop by the club on a Saturday. Would be cool to stop by the FD site now that I know where the club will be.

Shawn—KJ7MX

You are absolutely welcome to join us! The clubhouse is open every Saturday from 10 to 2 at 1249 So. Washington Street in Tacoma, WA. Lots of members show up, with plenty of donuts and coffee. And yes—please do try to come by Field Day. Go to www.W7DK.org to get details.

From QRZ,

Thanks Dave! A much better read than QST. Great work.

Steve—K0UO

From QRZ,

That's a real nice magazine, Dave! Shows a lot of work on your part. I hope it is appreciated by your fellow club members

73, Hal—WA1ZJL

Thanks for the kind words, Hal! I think the club indeed enjoys reading the Bark –ed.

From QRZ,

Great magazine! I love it!

Yoyok—YD1RGP Indonesia

From QRZ,

Excellent read! Thank you for sharing.

Michael—MW1EOR Wales

From QRZ,

Many thanks for the absolute great read of your club's newsletter Logger's Bark. I would have to say this is the best newsletter I have read—tons of really good stuff. I am in the Land of Aussies and would love to join your club. How does one go about this?

Mal—VK2MW Australia

Thanks Mal! Click HERE to see our new application that allows associate members from out of the area to join at a reduced rate!

THE MAILBAG

W7UUU

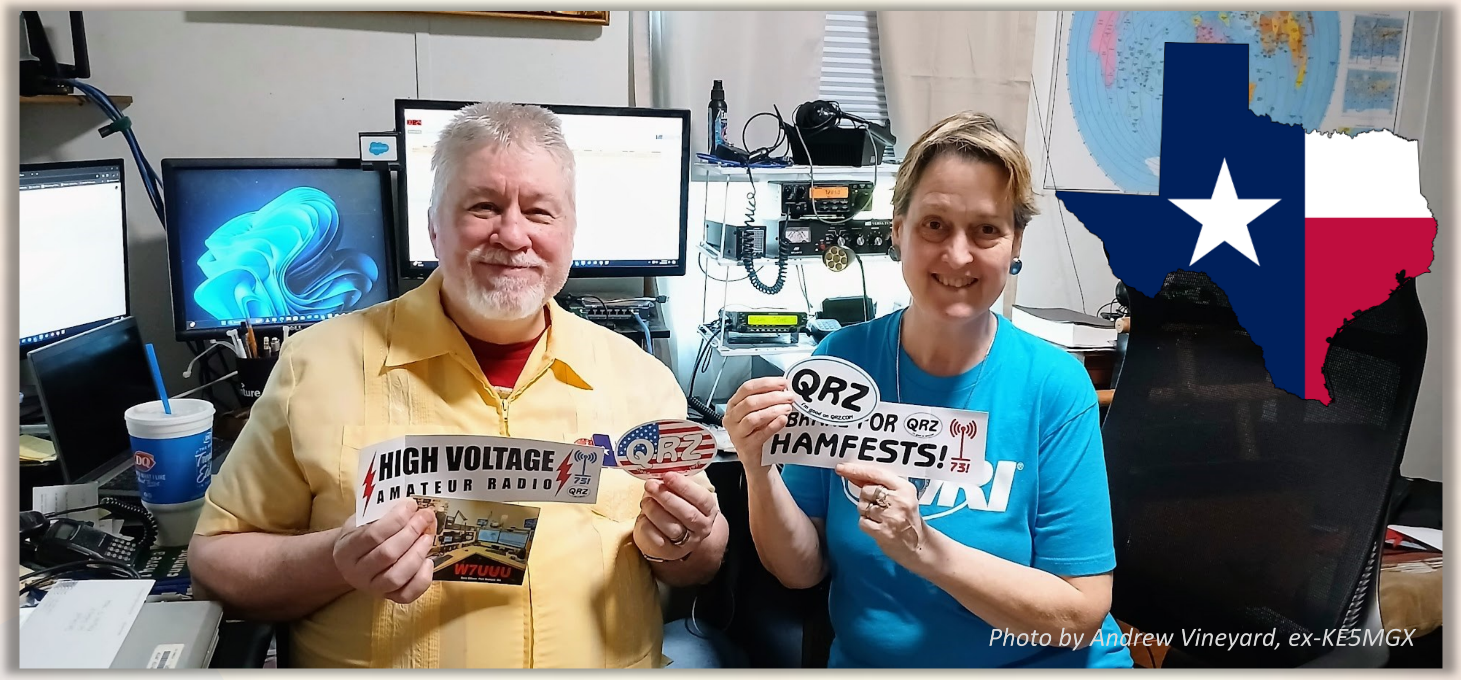


Photo by Andrew Vineyard, ex-KE5MGX

Jim Vineyard KA7SSR and Sheril Vineyard KE5MHL proudly display their QRZ stickers sent for ID'ing the May Mystery Member

OUR FIRST OUT OF STATE response to the Mystery Member from the June issue of The Bark! Jim and Sheril live in Pleasanton, Texas (30 miles South of San Antonio). A former Northwesterner himself, Jim actually passed his Novice license test right here at the Radio Club of Tacoma!

Says Jim, *"I'm probably too late to be first, but I immediately recognized that lovely lad as the editor of the Logger's Bark, Dave W7UUU"*. Not bad, figuring it out apparently from photos I've posted over time on QRZ.com. But since Jim is "out of state DX" he still gets stickers for taking the time to reach out with the correct answer!
Thanks for that Jim—73 to you and yours!

-Dave W7UUU

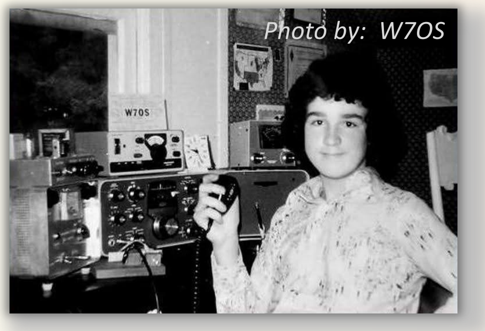


Photo by: W7OS

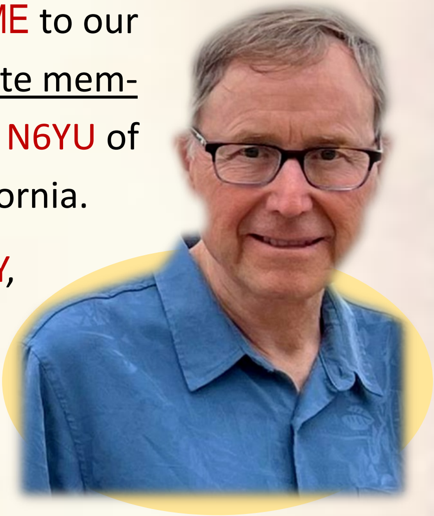
Mystery photo from the May Bark

THE MAILBAG

WELCOME TO Fabulous LAS VEGAS NEVADA
I BRAKE FOR QRZ HAMFESTS
HIGH VOLTAGE AMATEUR RADIO
QRZ

And here's another "State DX" - Bruce Parshall, KG7RKE in Nevada who correctly found the hidden word in a recent Logger's Bark and won stickers—Viva Las Vegas! Thanks for sending in the picture, Bruce!

And yet another "State DX" - Ronnie De Angelis NZ4X in Florida who also correctly found the hidden word in a recent Logger's Bark and won stickers—2700 miles DX!! Thanks for sending in the picture, Ronnie!



A WARM WELCOME to our newest out of state member—John Carter N6YU of Menlo Park, California.

Formerly WB6JNY, John upgraded to Extra recently and changed his call sign to something more CW friendly. He spends much of his radio time on HF using CW and Digital conversational modes. Menlo Park is on the West side of Silicon Valley, where his home and shack are located. On behalf of the entire Radio Club of Tacoma, a warm welcome and we hope you enjoy your time here!

-Dave W7UUU, editor

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse

Stephen AD7AB preparing to patch one of the club's radios into the antenna patch panel

And again, back at his usual spot downstairs in the Lou Room

Steve Blacksten AD7VL smiles while filling out paperwork on a transceiver donated to the club

HEY THAT'S ME !!

Steve AD7VL again, this time perusing a printed version of The Bark, only to be surprised finding himself to be the Mystery Member for the June issue!

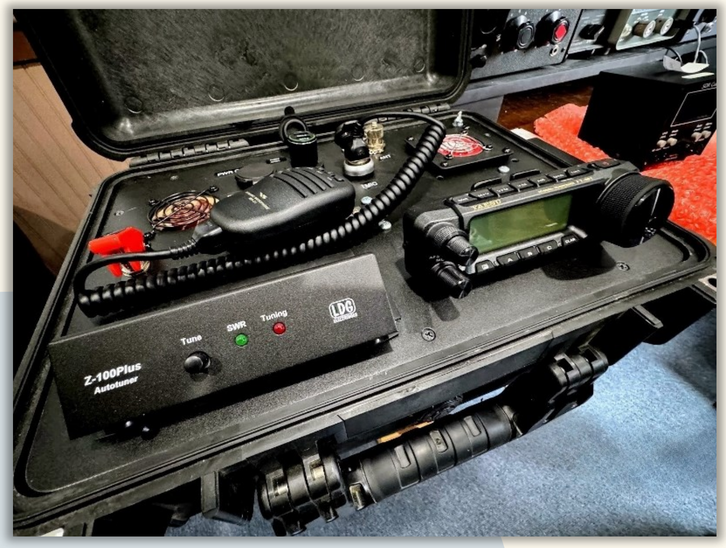
Got pictures from the clubhouse? Send 'em in!

All photos this page provided by Dave W7UUU

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse

Greg KT1A shows off his new POTA / "Go Box" kit he just built. Full writeup on Bark page 70



Closeup view showing the tuner and transceiver handily mounted in the Pelican case

Gary WG7X gearing up to work some FT8 in the Flex station on June 1

Nolan KG7BM, left, arrives just in time to visit with Gary WG7X down in the classroom June 15th

All photos this page provided by Dave W7UUU

Got pictures from the clubhouse? Send 'em in!

email loggersbark@gmail.com

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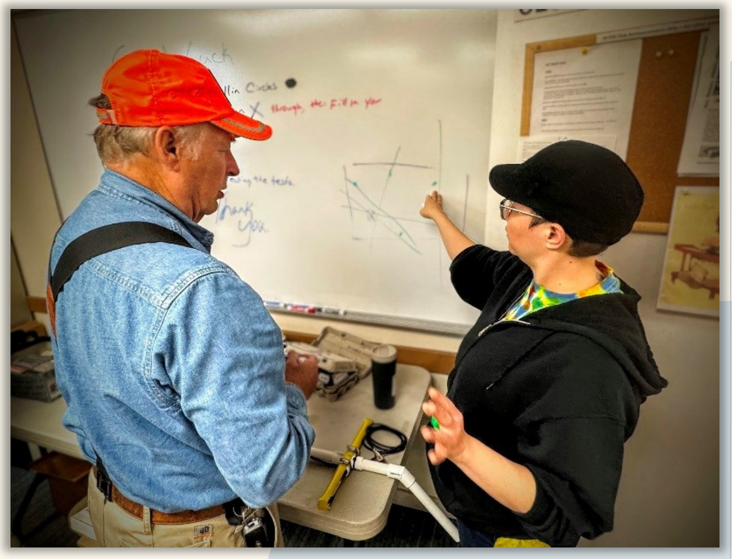
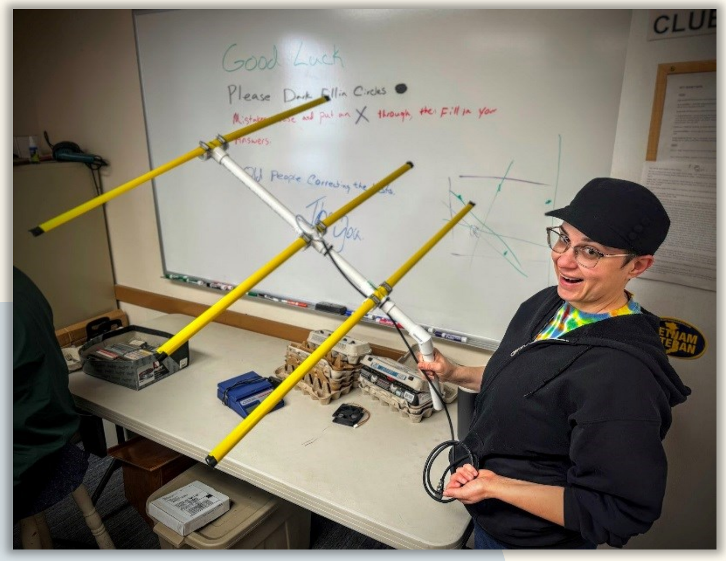
AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse



Mike W7MKE and Becky KG7FZH discuss triangulation techniques for RDF Bunny Hunting plans for the summer



Becky KG7FZH shows off her superbly-constructed RDF Bunny Hunt antenna she just completed

Phil KC7PS chillin in the Lou Room says "No, I have no intention to fix that amplifier—I have bigger plans right now"

Ellen AI7FP always with a smile hanging out beside the main club repeater rack in the Lou Room

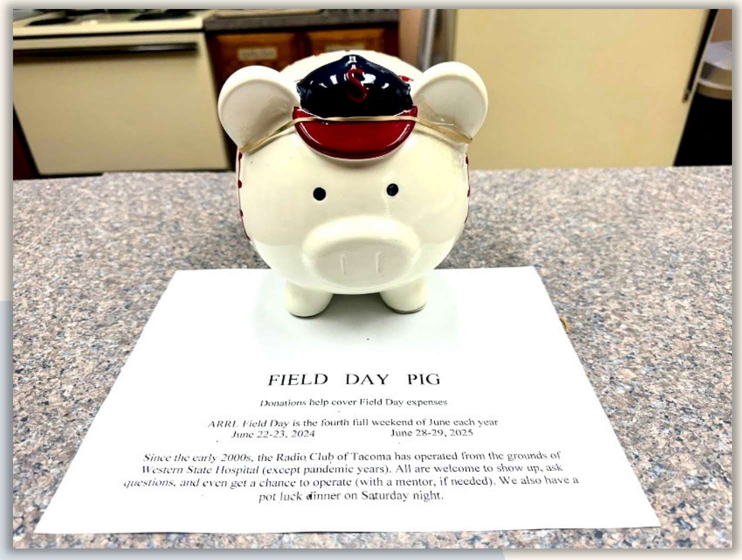
All photos this page provided by Dave W7UUU

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse

Al N7OMS, Bruce WB7EC and Mike W7XTZ research DX Engineering parts and pieces for upcoming club projects

Paul W7PFU showed up all smiles today (June 15th) as the proud winner of TWO grand prizes at SEA-PAC!



FIELD DAY PIG

Donations help cover Field Day expenses

ARRL Field Day is the fourth full weekend of June each year
June 22-23, 2024 June 28-29, 2025

Since the early 2000s, the Radio Club of Tacoma has operated from the grounds of Western State Hospital (except pandemic years). All are welcome to show up, ask questions, and even get a chance to operate (with a mentor, if needed). We also have a pot luck dinner on Saturday night.

The Pig is BACK! Yes—the Field Day Pig is back in circulation, collecting for Field Day expenses!!

Mike W7MKE (left) and Manny AD7MA discuss the pros and cons of bringing GMRS members and equipment into the club as a gateway to ham radio

All photos this page provided by Dave W7UUU

Got pictures from the clubhouse? Send 'em in!

email loggersbark@gmail.com

RETURN TO HOME PAGE

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse

I never get my picture in the Bark, so Anne N7ANN and I (W7UUU) decided to do a selfie on June 29th!

Stephen AD7AB visits with member Andrew KK7QKP

Chef Paul W7PFU hard at work in the clubhouse kitchen cooking up a big breakfast for a big crowd—we had more than 30 visitors this morning (June 29th) which is awesome!

Thanks for all you do Paul!

Jim W7VK talks boat anchor tech with Museum Curator Dan KD7SV

All photos this page provided by Dave W7UUU

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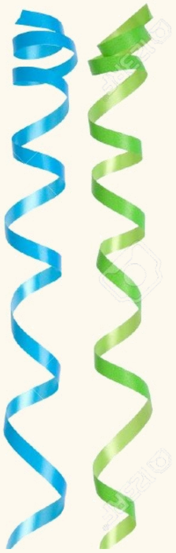
AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse

Adam W2NCC beams as he leads the charge to clean out the garage—yakking with Anne N7ANN



Robert Schlegel	N7BH
Gary Emmons	KH2AY
John Gentzel	K2CCT
Eric Tenborg	KK7EMG
Warren Tilman	KL0RA
Linda Tilman	KL0TU
David Bacon	KK7MVJ
Dennis Farnes	KA7IIV
Greg Sherman	KT1A
Richard Leary	W7LKG
Robert Decker	K7BD
Dennis Resop	K7DNY
Robert Mizener	N7BUW
Lorraine Nelson	K7LJN
Frederick Swift	KG7SV
Thomas Jonez	K7TDJ
Marie Fuller	N/A
John Buonora	KJ7SJM
Karl Moore	NA7KM
Larry Richardson	K7LBD
Adam Heinricy	KK7FLZ
Holly Eggleston	W6HCE
Paige Butler	W0FLZ

July Birthdays!!

Anne N7ANN with good friend & neighbor Jim W7VK in the clubhouse kitchen on June 29th

Charles AE7PC stops by the clubhouse on June 29th to checkout the "Last Saturday" Swapmeet and club feast events. All are welcome—any Saturday of the month, and Last Saturday for the Swap and Eats!

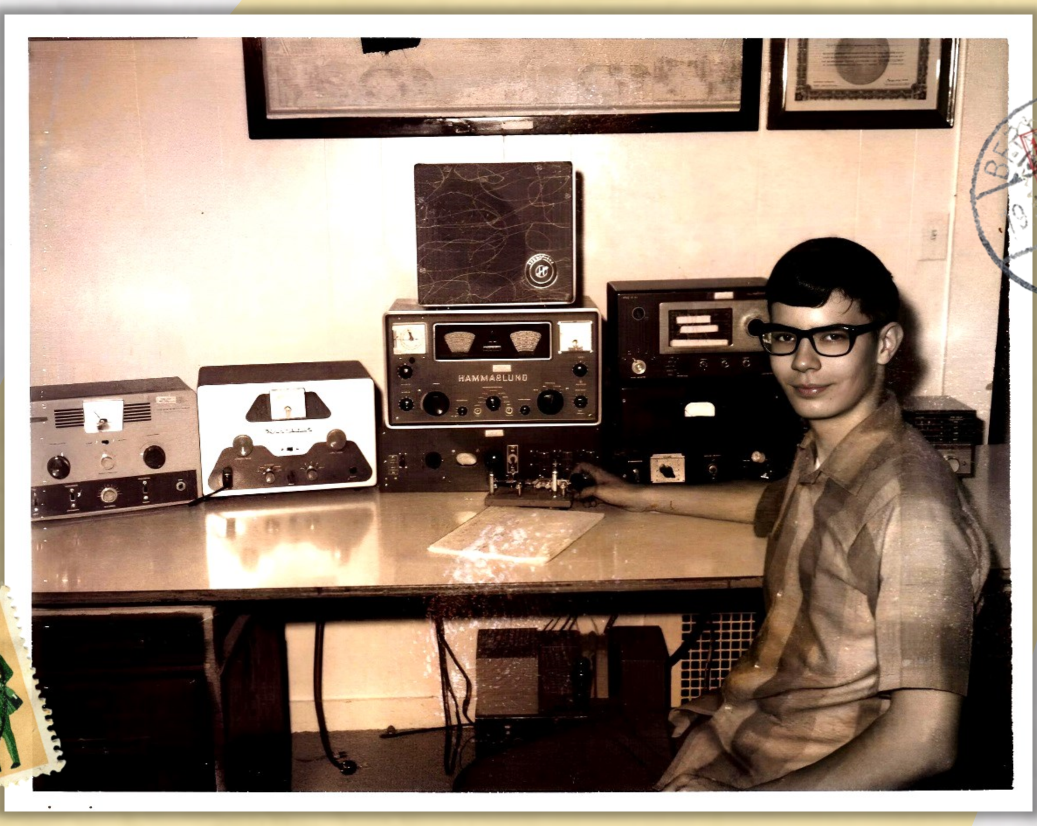
All photos this page by Dave W7UUU

THE WAY BACK PHOTO BOOTH

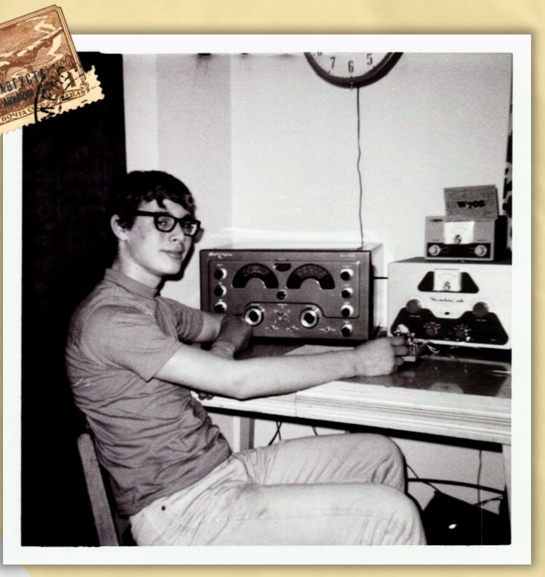
Highlighted photos from the club's past

Researched & Compiled by the Editor

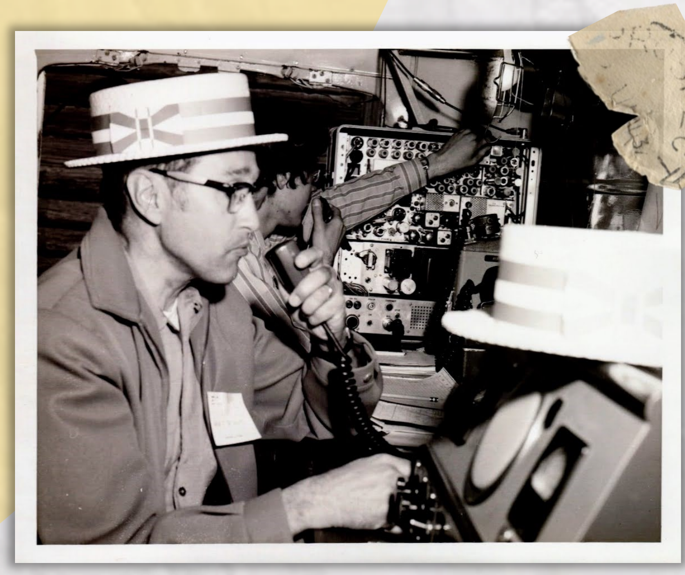
Photo:
Jim W7LS



Young Chip Margelli, K7VPF at the time, would become world-famous to hams as one of the best CW operators of all time as K7JA. But in this photo, he was just a young member of W7DK



Gary Kahtela, WA7NTF, working CW on his Heathkit DX-40 transmitter and National NC-183 receiver

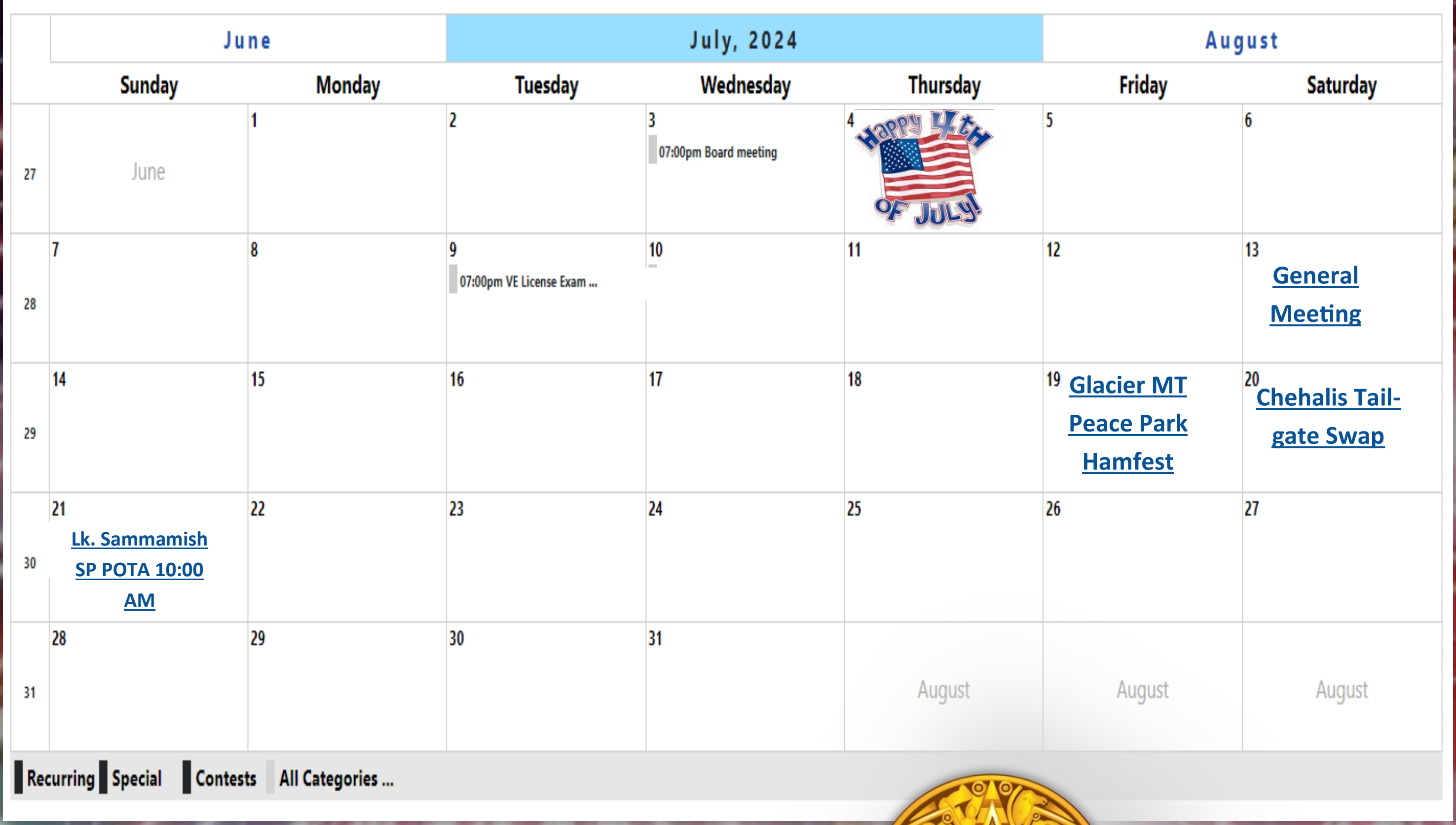


Joe Winter, WA7RWK (Nick K7MO's dad) operating 2m FM during Field day ca. 1970

THIS MONTH'S CALENDAR

Always check the W7DK website for latest news

W7DK



June | July, 2024 | August

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	June	1	2	3 07:00pm Board meeting	4 Happy 4th of July!	5	6
28	7	8	9 07:00pm VE License Exam ...	10	11	12	13 General Meeting
29	14	15	16	17	18	19 Glacier MT Peace Park Hamfest	20 Chehalis Tail-gate Swap
30	21 Lk. Sammamish SP POTA 10:00 AM	22	23	24	25	26	27
31	28	29	30	31	August	August	August

Recurring Special Contests All Categories ...

Did you know?

July was named **in honor of Julius Caesar**. Quintilis, which was his birth month, was renamed July after he died. Quintilis means “fifth month” in Latin, which represents where this month originally fell in the Roman calendar.

Et tu, Brute?
Wussup?
Can't kill me now…
it's the wrong month!

CLUB ANNOUNCEMENTS

Notices Big & Small Regarding the Club

W7UUU

MOST MEMBERS BY NOW should be aware that once again, the Radio Club of Tacoma has moved back to daytime meetings on the second Saturday of the Month, and once again at an Eagles Club location.

Back around 2018 when I was on my second term as President, I pushed to make this same change, so our more senior members wouldn't have to drive at night on Wednesdays, not getting home until nearly 10:00 PM. At that time, we secured the meeting space at Eagles Aerie #3 on South Tacoma Way. Being an Eagle myself, and a member then of that Aerie, I was able to get us a space and the price was right. The budget was a lot thinner then, and we were able to rent the room for only $50 per month.

It was a little small, perhaps to some a little dark, but it was what we could find at the time for that budget and it ended up to be (in my estimation) a pretty cozy meeting space. We had a lot of fun there!

Until…. Covid-19. Like so many other good things Covid ended our ability to meet in public as we all know oh-so-well. We were forced to give up that sweet deal we had with Aerie #3 and say goodbye in February 2020 (our last meeting there before the lockdown).

As things opened back up, we started meeting back at the clubhouse on a limited basis, using Zoom for a hybrid meeting style as so many clubs did.

But now, in 2024, the time was right to again try to secure a larger space and go back to daytime Saturday meetings as we had done before.

At the June Board of Directors meeting the change back to a daytime meeting was approved.

So beginning June 8, 2024, the Radio Club is back to a Saturday daytime meeting—now at a different Eagles Aerie (#2933 at 7037 S. Pine Street in Tacoma). It's a bigger space, and we hope over time to see the crowds return. There's food available for purchase, as well as "adult beverages" for those so inclined. Please mark your calendars for every second Saturday of the month, with doors open at Noon and the meeting begins promptly at 1:00.

Hopefully, word will get out and we'll get the nice crowds once again like we had before. ■ *-editor*

Photos by Dave W7UUU

Eagles Aerie 2933, 70th & South Pine

CLUB ANNOUNCEMENTS

Notices Big & Small Regarding the Club

Steve AD7YD, Kathryn K7USR, and Cathi KG7RTQ waiting for the June General Meeting to begin

New member Brendan Leber, N0BML makes his introduction to the club. VP Adam W7NCC (tie) and President Mike W7XTZ (standing) look on

IT Wizard Randy WB4SPB playing "Wizard without a curtain" to make the Zoom connection and room audio happen.

VP Adam W2NCC all geared up for a great meeting and glad to be back in a nice meeting space!

Photos by Dave W7UUU

RCT Bulletin Board

Posted notes and other important stuff

Here's a useful tip when reading the Bark: if you want to view a link, "right click" > "Open link in new window" - that way you won't lose your place in the Bark!

Stick it on your calendar NOW! W7DK picnic location is now booked—Shelter #1 at Fort Steilacoom (same as years past) 8717 87th Avenue SW in Lakewood

Date is SUNDAY AUGUST 4th 10 to 4

Last Month's Mystery Member: Steve Blacksten, AD7VL! Thanks for all the great guesses

STATUE OF LIBERTY IN NEW YORK HARBOR

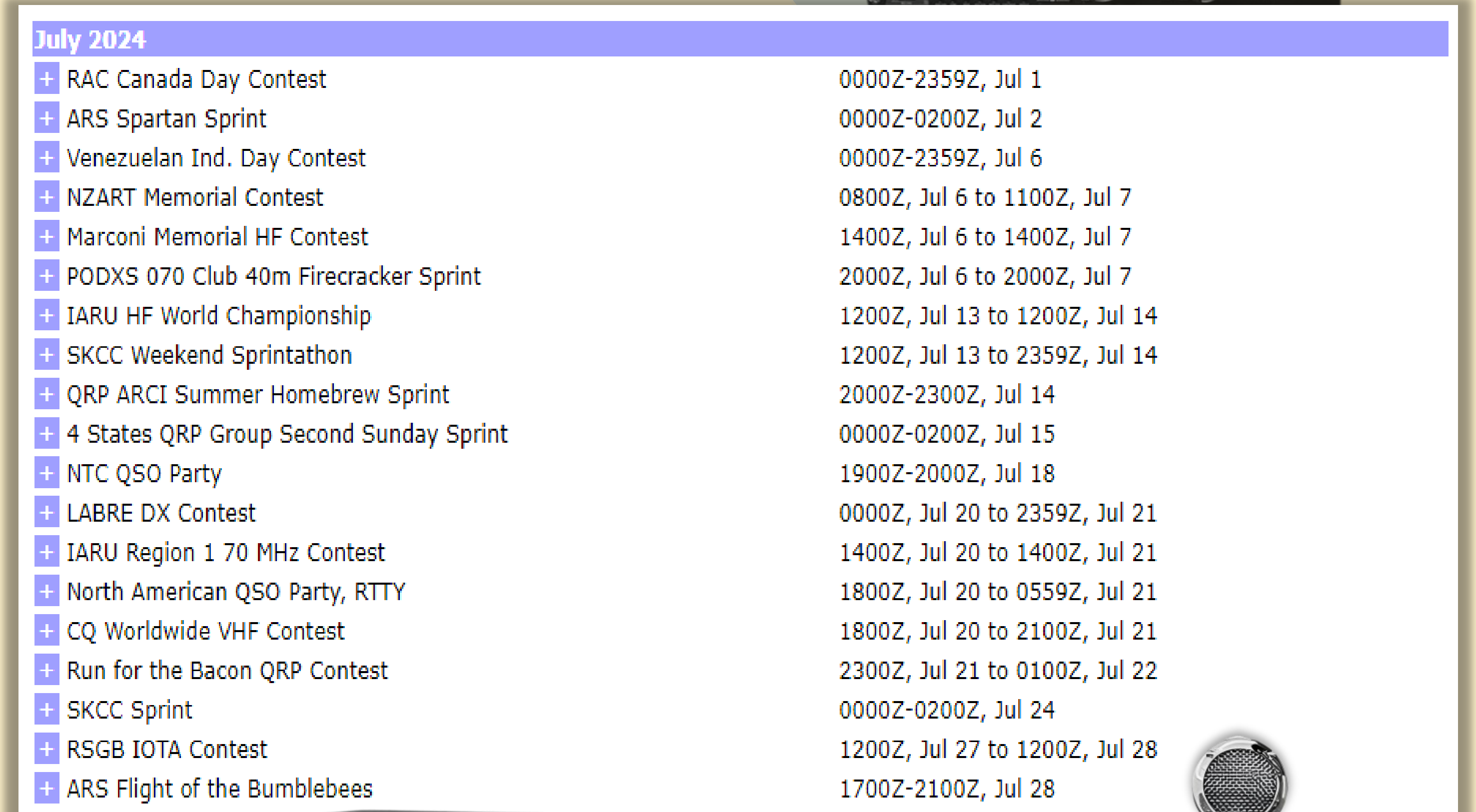
Last Month's Hidden Word: Galena

It was hidden on the Ham Shack of the Month page! First found by "Out of State Reader" Ronnie NZ4X of Florida on the June Living Histories page! Congrats Ronnie!!

WA7BNM CONTEST CALENDAR

Contest events for the coming month

HUGE thanks to Mr. Bruce Horn, WA7BNM for publishing his “Contest Calendar” for all these many years… a truly wonderful resource for finding virtually every ham radio contest on Earth that might be happening, in most any mode and most any region in the world. Follow the link to take you to the site, then sort through the various options to find the specifics of every upcoming event. For now, here’s the WA7BNM Contest Calendar for the coming month



July 2024	
+ RAC Canada Day Contest	0000Z-2359Z, Jul 1
+ ARS Spartan Sprint	0000Z-0200Z, Jul 2
+ Venezuelan Ind. Day Contest	0000Z-2359Z, Jul 6
+ NZART Memorial Contest	0800Z, Jul 6 to 1100Z, Jul 7
+ Marconi Memorial HF Contest	1400Z, Jul 6 to 1400Z, Jul 7
+ PODXS 070 Club 40m Firecracker Sprint	2000Z, Jul 6 to 2000Z, Jul 7
+ IARU HF World Championship	1200Z, Jul 13 to 1200Z, Jul 14
+ SKCC Weekend Sprintathon	1200Z, Jul 13 to 2359Z, Jul 14
+ QRP ARCI Summer Homebrew Sprint	2000Z-2300Z, Jul 14
+ 4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Jul 15
+ NTC QSO Party	1900Z-2000Z, Jul 18
+ LABRE DX Contest	0000Z, Jul 20 to 2359Z, Jul 21
+ IARU Region 1 70 MHz Contest	1400Z, Jul 20 to 1400Z, Jul 21
+ North American QSO Party, RTTY	1800Z, Jul 20 to 0559Z, Jul 21
+ CQ Worldwide VHF Contest	1800Z, Jul 20 to 2100Z, Jul 21
+ Run for the Bacon QRP Contest	2300Z, Jul 21 to 0100Z, Jul 22
+ SKCC Sprint	0000Z-0200Z, Jul 24
+ RSGB IOTA Contest	1200Z, Jul 27 to 1200Z, Jul 28
+ ARS Flight of the Bumblebees	1700Z-2100Z, Jul 28

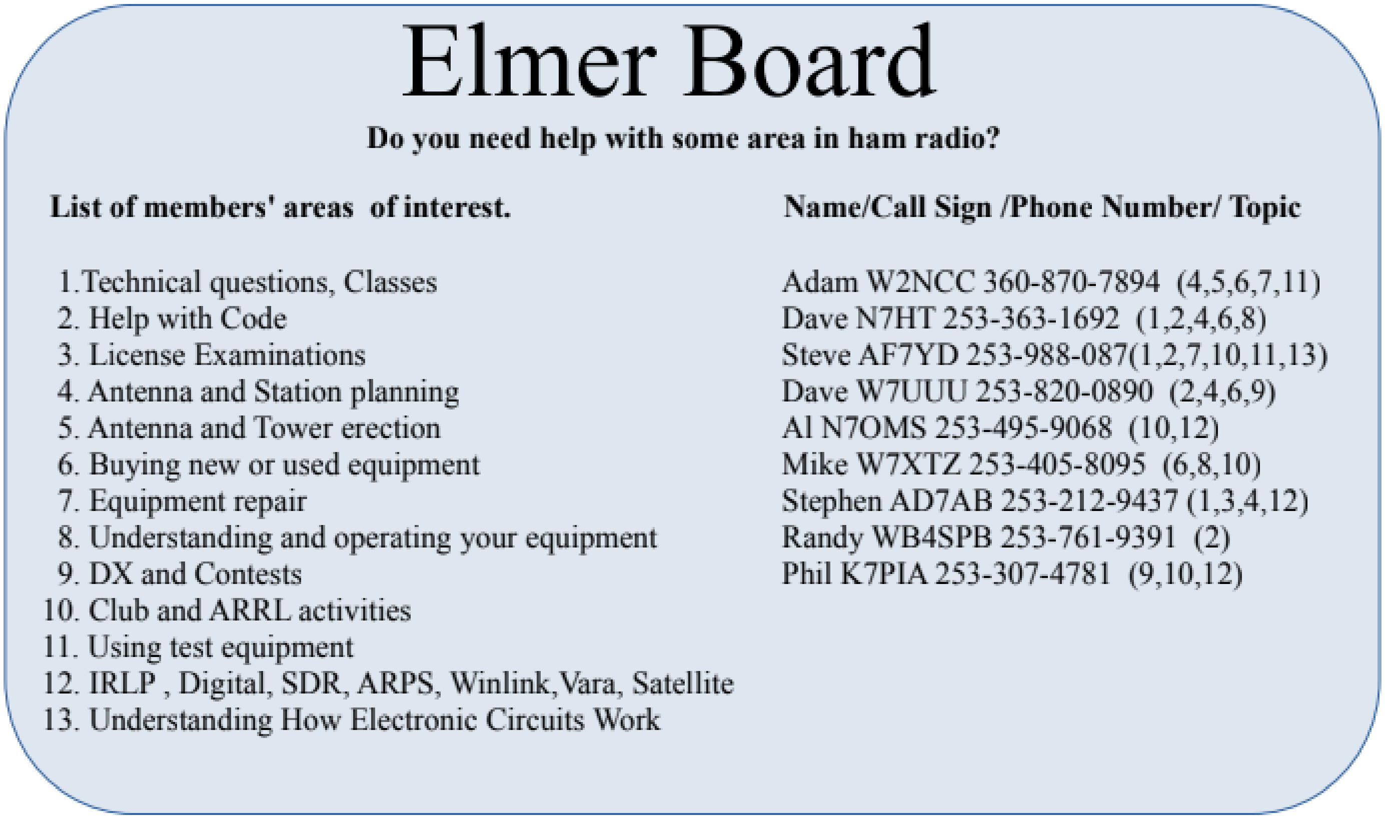
RETURN TO HOME PAGE

THE W7DK ELMER BOARD

Do you have a skill or tool to help new hams?

YOU! YES *YOU!* Do YOU have a skill you could pass on to new amateur radio operators? Do you possess a skill or piece of gear that you're willing to share with others to fix antenna problems, diagnose noise issues, drive a ground rod, teach Morse, help teach technical topics? If the answer is YES you too could be a W7DK Elmer!! Let any officer know what your skills are or how you could help new hams get a leg up on the hobby. And if you're one of those already on the list, are there any changes we should be aware of? If so please hit the email address (found bottom of page on the right) and let us know so we can update the W7DK Radio Club of Tacoma "Elmer Board".

NEW HAMS OR MEMBERS: If you are looking for help, and NEED AN ELMER to help guide your way, use this table! Find the skill you need on the left, then look for an Elmer Provider of that skill on the right and reach out to them. ALL of these Elmer's have committed to helping so please don't hesitate.



Elmer Board

Do you need help with some area in ham radio?

List of members' areas of interest.

1. Technical questions, Classes
2. Help with Code
3. License Examinations
4. Antenna and Station planning
5. Antenna and Tower erection
6. Buying new or used equipment
7. Equipment repair
8. Understanding and operating your equipment
9. DX and Contests
10. Club and ARRL activities
11. Using test equipment
12. IRLP , Digital, SDR, ARPS, Winlink,Vara, Satellite
13. Understanding How Electronic Circuits Work

Name/Call Sign /Phone Number/ Topic

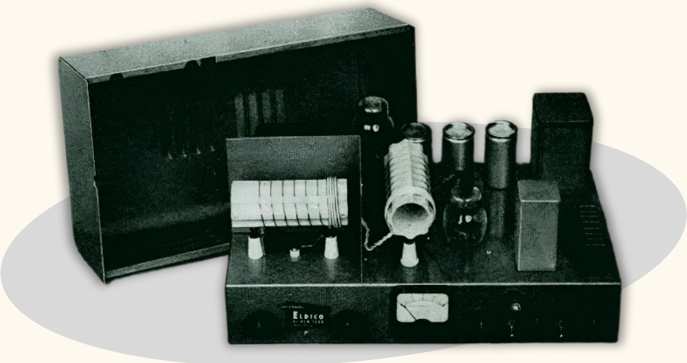
Adam W2NCC 360-870-7894 (4,5,6,7,11)
Dave N7HT 253-363-1692 (1,2,4,6,8)
Steve AF7YD 253-988-087(1,2,7,10,11,13)
Dave W7UUU 253-820-0890 (2,4,6,9)
Al N7OMS 253-495-9068 (10,12)
Mike W7XTZ 253-405-8095 (6,8,10)
Stephen AD7AB 253-212-9437 (1,3,4,12)
Randy WB4SPB 253-761-9391 (2)
Phil K7PIA 253-307-4781 (9,10,12)

I DECIDED TO CREATE THIS *column heading to run occasional reminders about safety—in the shack, as well as outside in the yard and the field. If you have ideas for this topic, please don't hesitate to send them to me at the email address below.*

This month's contribution comes in from Idaho, from Rich Patrick, KR7W (former curator of the W7OS Doc Spike museum in the clubhouse).

SAYS RICH:

"A few years before Covid I found an Eldico TR-75TV novice transmitter at the Mineral Winter/ Summer Fest. $40 purchase. I wanted it because it had a very nice, well preserved Eldico label on it—to celebrate the popularity and uniqueness of the Eldico SSB-100F transmitter at the W7OS museum, and possibly to use on Straight Key Night.



Eldico TF-75TV photo from original 1950s Eldico print ad

The 'TV' designation refers to version 2, where it was TVI (TV interference) proofed.

It had ten crystal sockets that were switched by a knob on the front panel, far right. It used 2 plug-in coils for changing bands: one for the crystal oscillator, and one for the Pi-Network output. The oscillator used a 6AG7 feeding a single 807 power amplifier.

Side Note: The overly complicated TR75 makes the Heathkit AT-1 look very, very simple to operate. You had to remove the entire top cover on the TR75 to change 2 coils to switch from 40 to 80 meters!

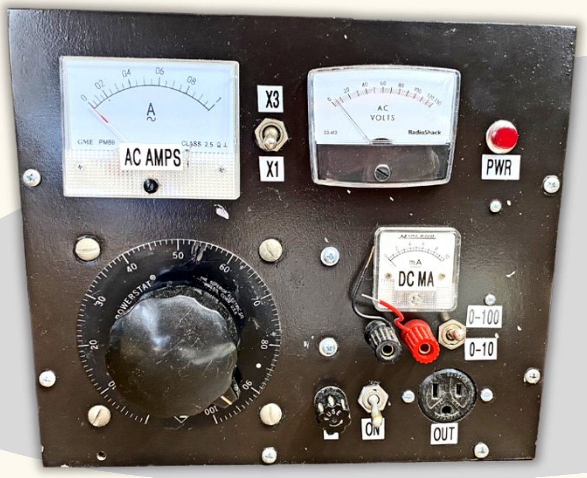
My goal was to clean up and prettify the TR-75, and I also decided to soup It up by removing the 5U4 rectifier and replace it with 1N4007 diodes to raise the HV up to best run the 807 PA tube at 45 Watts output. The HV was successfully raised from 500 to 710 VDC. Of course, this also raised the Low Volts that ran the 6AG7 oscillator. After a few eBay purchases, I added many 10 Watt voltage divider resistors and finally got the low voltage correct.

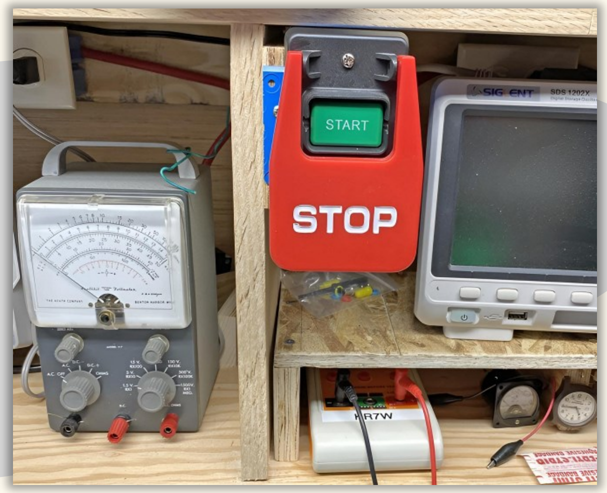
I had it on my bench, tipped up on it's side, with 40M coils plugged in..... (*cue suspenseful music*). ***The high voltage was on*** and I reached around the transmitter and my left *armpit* touched the PA tuning coil that always had 700 volts on it. My left *hand* was touching the chassis ground... *and then*...

> " *ZAP! I was being electrocuted and I knew it* "

I tried and tried but *couldn't let go*. Finally, I could let go because the HV had shut off. A small miracle bestowed on me. I sat down on the floor and deep breathed fast in-out to calm down.

So how'd the HV stop? Turned out that I had (and always do) plugged the **D**evice **U**nder **T**est, DUT, into





Master power KILL switch

my homebrew Acme AC Power Test Jig that contains a 7 Amp Variac, a big Isolation XMFR, Volt and Ammeters, and accessory meters. It contains a 6 amp Line fuse, which is what blew to shut down the AC that fed that Damn'd El-Dico TR-75.

After that very scary electric shock, once some rationality returned to me, I placed the Eldico in the corner on the floor of the Acme Radio Repair Shop. It sat there for 3 or 4 months before I packed it up and took it to Radio Club of Tacoma Clubhouse to give away.

At that time, I vowed to not work on equipment over 50 volts while alone in my shop. Ms. Pat WT7N had to be home and I had to notify her. And as Commander and Chief of the W7OS Museum, I implemented the same 50V rule for Museum people working on equipment.

Also, the Museum workbench has an easy access MASTER KILL AC switch to shut it all down if something goes wrong. As also seen at KR7W's workbench in Idaho.

EPILOGUE:

I was very fortunate that the TR-75's 710 volts were not flowing through my Left armpit to Right hand, otherwise...."

-Rich KR7W

ONE OF THE LONG-STANDING *electrical safety rules, one that I myself learned almost 50 years ago: NEVER work on high voltage circuits such as found in Boat Anchor rigs with both hands inside the chassis area. Always keep one hand in your back pocket or behind your back while probing (with a duly-rated high-voltage probe) with your other hand.*

Never have one hand on the chassis or on anything grounded at any time when your other hand is near high voltages. NEVER wear conductive jewelry (remove rings, bracelets, necklaces) that could inadvertently make contact with high voltages when least expected.

It's never worth serious injury and especially death to work on ham radio gear. Safety first!

-Dave W7UUU

HAM RADIO HOSPITAL
Where sick radios come back to health

EVEN TO THIS DAY, the venerable Heathkit HW-8 QRP transceiver is still commonly in use on the air among QRP aficionados everywhere. In fact, since its debut in 1976 (discontinued in 1983), the HW-8 has had more than 80 modifications published. These mods attest to the core functionality of the rig, and the desire for QRP operators and tinkerers to ever expand its usefulness into the modern era.

One of the best mods ever to come along for the HW-8 is actually one of the easier to perform, and is the subject of this month's Ham Radio Hospital column. The stock HW-8 has a dial covering 250 KHz on its 4 bands: 80, 40, 20 & 15. But given the HW-8 is a CW-only transceiver, there's not much point in covering more than 125 KHz of any band. By having such a long bandspread, the tuning control can be touchy when dialing in closely-spaced signals. There is also a slight backlash in the vernier dial mechanism Heath used, which adds to that touchiness.

What follows is a straightforward modification originally published by Bill Coleman, N4ES that reduces that dial coverage to 125 KHz. The mod calls for a new tuning dial label to be made, that reflects the reduction in dial coverage.

If you are an avid user of a Heathkit HW-8, this may well be "just what the doctor ordered" here in the Ham Radio Hospital. Full article continues beginning in the next column.

-Dave W7UUU

Unmodified HW-8
Photo by W7UUU

By Bill Coleman, N4ES

THE QRP BUG BIT ME AGAIN, so I picked up a clean little Heathkit HW-8 QRP CW transceiver at a recent hamfest. My first QSO on the little rig was with G3UFY on 15 meters, which was quite a surprise. Although the HW-8 uses a direct-conversion receiver, the sensitivity is excellent, and adequate selectivity is provided by the built-in audio filter.

The heterodyne VFO provides excellent frequency stability, but the tuning is a bit touchy, and there is just a hint of backlash. Although I had told myself that this was one rig I was not going to modify, I could not help myself. How about one simple, easily reversible modification that slows down the tuning rate by decreasing the tuning range from 250 kHz to 125 kHz, which is where I always operate anyway?

And besides, with the renewed interest in QRP these days, there must be plenty of other HW-8 owners out there who would be interested in this simple modification.

HAM RADIO
HOSPITAL
Where sick radios come back to health

THEORY OF OPERATION

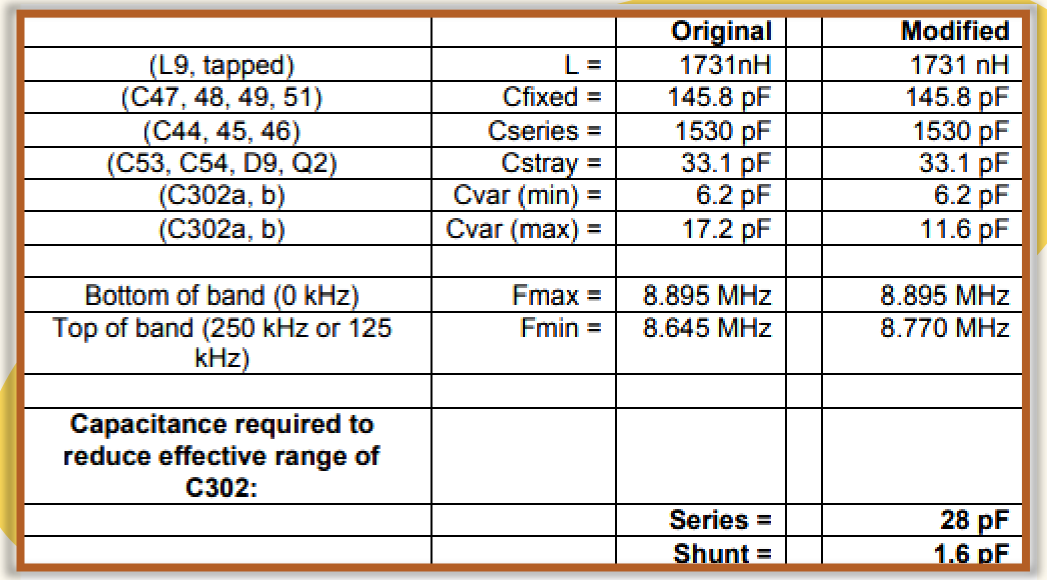
The frequency of the VFO is determined by the inductor (L9), numerous fixed capacitors, the main tuning variable capacitor (C302), and stray inductance and capacitance of the circuit. L9 is center-tapped, with one half forming the inductive portion of the resonant circuit, and the other half providing feedback for the oscillator. C302 is divided into two sections: C302a is the main tuning section, and C302b is the trimmer which is adjusted during alignment of the VFO.

The ratio of the highest to the lowest frequency in any VFO which is tuned by a variable capacitor is equal to the square root of the ratio of the minimum to the maximum net capacitance in the resonant circuit, including fixed capacitors, the tuning capacitor, and all stray capacitance.

The tuning range of a VFO can be altered by knowing the capacitance range of the variable capacitor alone; the inductor value is a constant which cancels out, so long as the net capacitance is held constant for one end of the tuning range. However, once the equations are solved to reveal the net stray capacitance in the circuit, the inductance value can be calculated.

Table 1 shows the effective component values for the original and modified VFO tuning ranges.

As shown in Table 1, the tuning range of the main VFO tuning variable capacitor C302 can be reduced appropriately by connecting a 28 pF capacitor in series and a 1.6 pF capacitor in parallel. In the HW-8, the "hot" side of C302 is connected to the main circuit board by a single wire, which is an ideal place to insert the series 28 pF capacitor. The trimmer portion of C302 has more than enough range to add the required 1.6 pF parallel capacitance. Inductor L9 may need a slight tweak as well.



		Original		Modified
(L9, tapped)	L =	1731nH		1731 nH
(C47, 48, 49, 51)	Cfixed =	145.8 pF		145.8 pF
(C44, 45, 46)	Cseries =	1530 pF		1530 pF
(C53, C54, D9, Q2)	Cstray =	33.1 pF		33.1 pF
(C302a, b)	Cvar (min) =	6.2 pF		6.2 pF
(C302a, b)	Cvar (max) =	17.2 pF		11.6 pF
Bottom of band (0 kHz)	Fmax =	8.895 MHz		8.895 MHz
Top of band (250 kHz or 125 kHz)	Fmin =	8.645 MHz		8.770 MHz
Capacitance required to reduce effective range of C302:				
		Series =		**28 pF**
		Shunt =		**1.6 pF**

Table 1—VFO Tuning Range

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The only remaining requirement is a new scale for the tuning dial. See below:

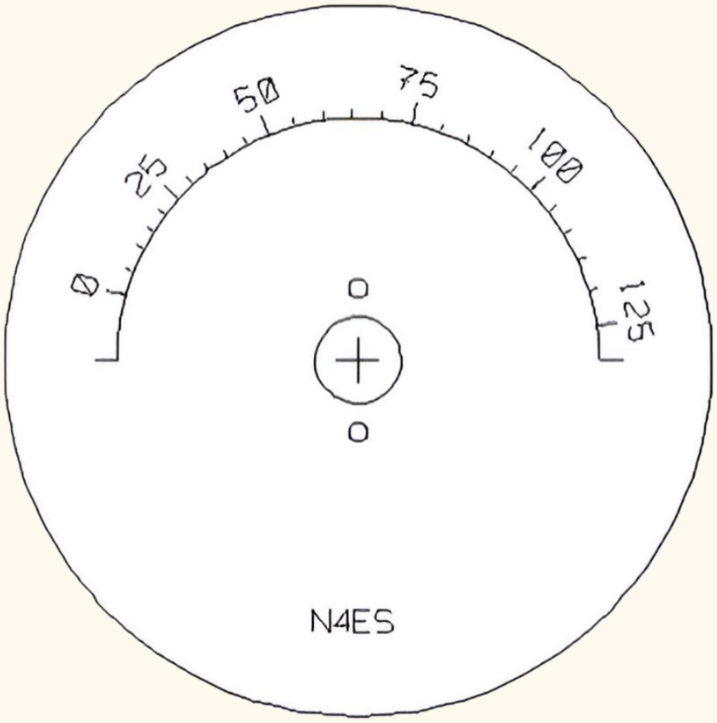

Figure 1*—Very close approximation of the new scale that must be printed, cut out, and affixed to the plastic dial of the HW-8. To download and print the original PDF which is sized precisely, CLICK THIS LINK.*

You will notice that in the mixing scheme employed in the HW-8, the VFO tunes backwards, as shown in ***Table 1***. Measurement of the original tuning dial of the HW-8 reveals that the dial scale starts 15.5 degrees from the mechanical stop (minimum capacitance), and rotates approximately 31 degrees per 50 kHz. The overall dial is 3.13 inches in diameter, and has a scale arc that is 2.13 inches in diameter. The new dial scale starts at the same point, and rotates approximately 31 degrees per 25 kHz.

The dial calibration tick marks, originally spaced at approximately 3.1 degrees per 5 kHz, are now spaced at approximately 6.2 degrees per 5 kHz. A dial based upon purely linear tuning was tried, but the calibration error was unacceptable. The deviation from linear tuning was measured, and a corrected dial was designed.

Looking back, the most direct way to design an accurate dial scale would have been to fabricate a degree wheel calibrated from 0 to 180 degrees, and note the reading for each desired frequency mark in a table. The rotate function of a CADD program could then be used to place the calibration marks at the appropriate locations on the dial. Instead, I started with a linear dial, determined the error of each mark in degrees, and rotated each mark by the amount of the error. The new dial was designed using the Generic CADD program for PC, but you can also just make a photocopy of the full-size dial scale shown in ***Figure 1.*** (Download link).

MODIFICATION

The modification of the HW-8 is simple and easily reversible. Just rotate the original dial scale so that the blank half is showing, lay the new paper dial

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scale over it, and reinstall the two screws.

Insert a 28 pF capacitor between C302 and the circuit board, and realign the VFO. See Figure 2.

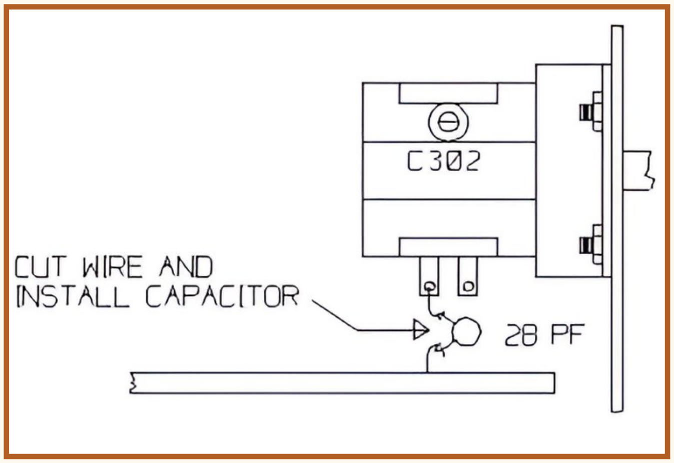

***Figure 2**—cutting the "hot side" of C302 to insert 28pF cap*

The entire process takes about an hour, using the following step-by-step procedure. Ceramic disc capacitors are available from Mouser, Digi-Key, and even eBay and Amazon. Most low capacitance ceramic capacitors use thermally stable materials, and no frequency drift has been noticed with the modified VFO.

From an assortment of low-value pF capacitors, I used a 22pF and a 6pF capacitor in parallel. Just twist the capacitors' leads together to make your own 28 pF value. [*it's a good idea to test the actual value using an LCR meter –editor*]

You can use any two or more capacitor values which add up to 28pF, such as 10pF and 18pF. Unfortunately, 28 pF is not a standard value in most capacitor series. The 28 pF capacitor is the optimum value for 125 kHz total coverage. A larger value would increase the frequency coverage, while a smaller value would decrease the frequency coverage.

1. Start preparing the new paper dial scale by cutting it out with scissors. Next, carefully cut out the large center shaft hole and the two smaller screw holes using an X-ACTO knife or similar. Once you are satisfied with the dial scale, set it aside and begin working on the HW-8.

2. Remove the top cover by removing the two rear screws and the two side screws. Set the main tuning dial to the 250 kHz end of its travel to fully mesh the plates of C302. This gets the plates out the way and protects them from damage. It also keeps you from installing your new dial backwards.

3. Set the LOADING and RECEIVER PRESELECTOR controls for full engagement of the capacitor plates. *Note the positions of the control knobs*.

4. Remove the front panel by first removing all of the knobs, and then removing the bushing nuts from the SELECTIVITY switch and the AF GAIN control. Set the front panel aside.

5. Remove the two screws securing the original dial scale. The original dial scale is used to provide sup-

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port for the new paper dial scale. Leave the original dial scale on the shaft, but rotate it 180 degrees so that the plain white half is showing. (Note: **DO NOT** flip the original dial face inward, toward C302. I tried it, and damaged the original dial by scratching the numbers where the dial rubs against the heads of the screws which secure the mounting bracket for C302). Set the new paper dial scale over the original dial scale with the 125 kHz end pointing upward, and reinstall the two screws, being careful not to overtighten them and tear the paper. A few tiny dots of "glue-stick" applied with a toothpick may be required to get the paper dial scale to lie flat against the original dial scale.

6. Reinstall the front panel, being careful to properly align the RELATIVE POWER meter with the opening in the panel. Reinstall the bushing nuts to secure the panel, and reinstall the knobs. Do not reinstall the top cover until completing the VFO alignment procedure.

7. Cut the wire from C302 to circuit board point "F" near the center of the wire, as shown in ***Figure 2***. Using long-nosed pliers or sturdy tweezers, form hooks in the two remaining wire ends for attachment of the capacitor. Form similar hooks in the leads of the 28 pF capacitor, and attach the capacitor leads to the hooked ends of the two wires. Crimp the hooks to secure the capacitor in place, and solder the connections, being careful not to overheat any adjacent components. Allow the capacitor to cool before beginning the alignment procedure.

ALIGNMENT

The alignment can be performed using a frequency counter, as described below, or it can be performed in accordance with the VFO ALIGNMENT steps from the HW-8 manual, substituting 7.125 MHz for 7.250 MHz as appropriate.

To perform the VFO alignment using a frequency counter, connect the HW-8 to a dummy load prepared as shown in PICTORIAL 5-2 of the HW-8 manual (LINK). If you do not have access to the manual, fabricate a 50-ohm dummy load by connecting two 100-ohm 2-watt resistors in parallel to an RCA connector, using short leads.

Connect a manual key to the HW-8's key jack. Turn on the HW-8 and the frequency counter, and allow them both to warm up for at least 30 minutes. Connect a shielded lead to the frequency counter that has a two-inch insulated but unshielded section at the end. Select the 7 MHz band on the HW-8, and set the dial to 7.000 MHz. Press the key, and hold the unshielded end of the frequency counter's pick-up cable near the dummy load until a stable frequency is displayed.

If necessary, tape the pick-up lead in place near the dummy load. Adjust the trimmer portion of C302 (C302b) until a frequency of 7.000 MHz is displayed on the frequency counter. Release the key. Set the dial to 7.125 MHz. Press the key, and adjust the slug in L9 until a frequency of 7.125 MHz is displayed on the frequency counter. Repeat the 7.000 MHz and

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7.125 MHz steps until correct tracking is achieved.

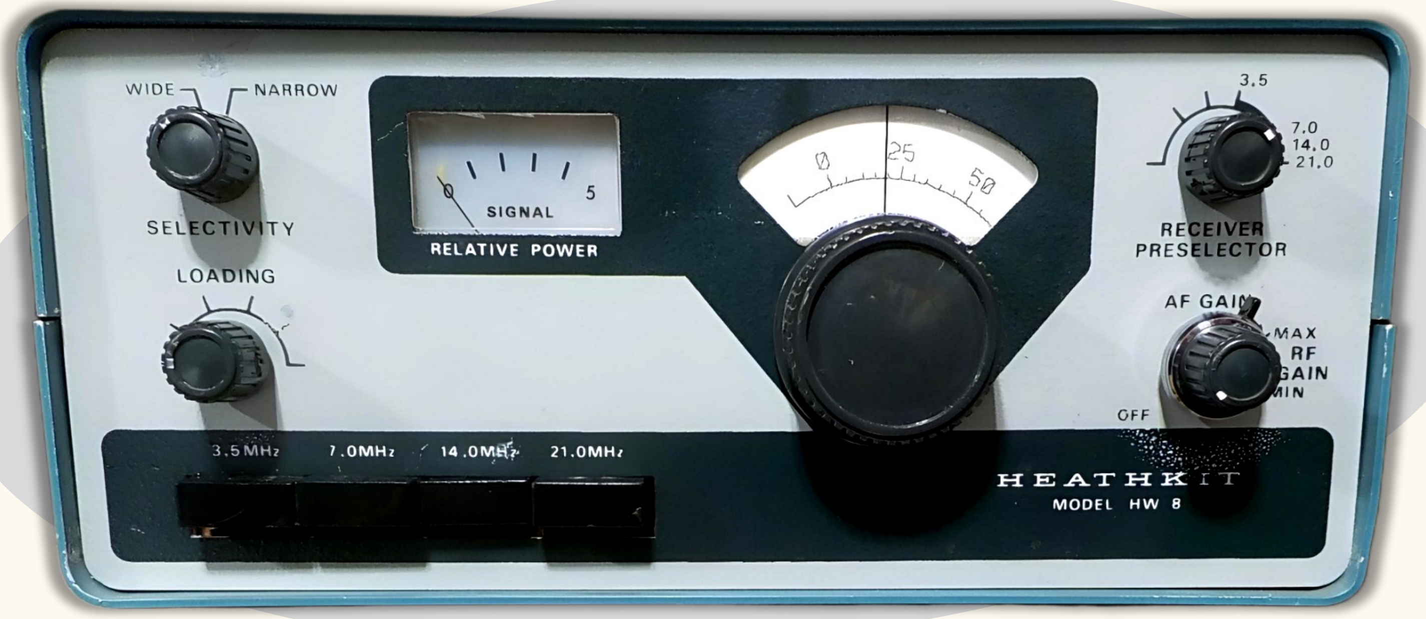
The process can be shortened by slightly "over correcting" during the first few steps. Remember to adjust only C302b at 7.000 MHz and only L9 at 7.125 MHz.

Now it is time to reinstall the top cover and enjoy operating the modified HW-8. The frequency accuracy with the new dial installed should be better than 1 kHz across the 125 kHz tuning range.

CONCLUSION

Operating the modified HW-8 is a pleasure. Digging other QRP signals out of the QRM with the narrow audio filter is easier now, because the dial backlash is no longer noticeable. The tuning now has more of a big-rig feel, yet it is not so slow as to be annoying. Perhaps the best feature of this modification is that it can be undone by simply reversing the two dial scales, connecting a jumper wire across the 28 pF capacitor, and realigning the VFO.

-Bill Coleman N4ES



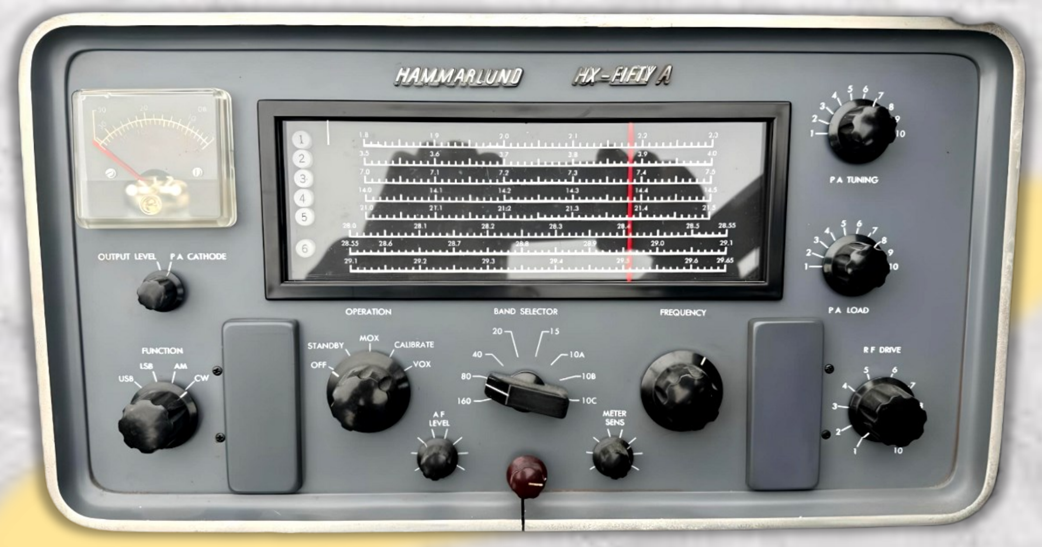
Completed modified HW-8 QRP Transceiver, as done by Don KL7KN (photo by KL7KN—thanks!). Big thanks to Bill N4ES for granting permission to republish this great “how to” article in the July 2024 issue of *The Logger’s Bark* Ham Radio Hospital column. Do YOU have a “radio hospital” project you’d like to see published? Just shoot me an email at the address below. Until next month, 73 from Dave W7UUU

W7OS DOC SPIKE MUSEUM

Featured Gear from the Museum

Dave **W7UUU**

ONE OF THE INTERESTING pieces of vintage tube gear received as part of a large donation, is actually something pretty rare: a Hammarlund HX-50A "Exciter-Transmitter". Introduced in 1962, the HX-50 was a revamping of the earlier (1960) HX-500 single-sideband transmitter that didn't sell well. The HX-50 was simpler in design and lower in cost than its predecessor, but even at that was never a very popular transmitter. Original cost was $399 which would inflate to over $4,000 today!



Front panel of the museum's HX-50A transmitter—photo: W7UUU

There were two versions: The HX-50 and the HX-50A. The only difference is the A version included the coils and resonant circuits for the 160 meter band (1.8 to 2.0 MHz). A conversion kit was available ($10 extra at the time, about $40 today) to add the missing band to the non-A transmitter, but very few were ever sold. In my research for this article, I was only able to locate a single report of an HX-50 having been converted, which was done in the modern era. In that case, the owner managed to find an original unused band kit.

The conversion was extremely delicate and difficult. Converting one today would not be very practical, as the kit involved disassembling the band switch and adding a new switch wafer—something that would be very tough to source today. An unused Hammarlund conversion kit would truly be impossible to find today, as so few were likely made up.

The HX-50 was advertised as an "Exciter-Transmitter" as was fairly common in that era. An exciter was considered to be a lower-power transmitter, designed to have sufficient drive for an external linear amplifier. The single 6DQ6 TV sweep tube final amplifier was capable of around 65 watts RF output on the lower bands, dropping to 50 watts on the 10m band.

Although the HX-50 was capable of AM and CW, SSB was coming of age in the early 1960s (the mode had been around for many years but only then catching on in a big way) with the HX-500 first, then the HX-50, these transmitters were Hammarlund's chance to try to capture some of that market share.

The feature-set presented was very nice for such a transmitter, offering niceties such as PTT (Push to Talk) operation as well as VOX (voice controlled operation). PTT didn't work "out of the box" however—terminals for PTT control were provided on the rear panel and the user would have to make up the connections himself.

The two rectangular doors on the front pane hid the controls for VOX sensitivity and delay, anti-VOX, CW TR (transmit > receive) delay, a Crystal / VFO switch, and

W7OS DOC SPIKE MUSEUM

Featured Gear from the Museum

Dave W7UUU

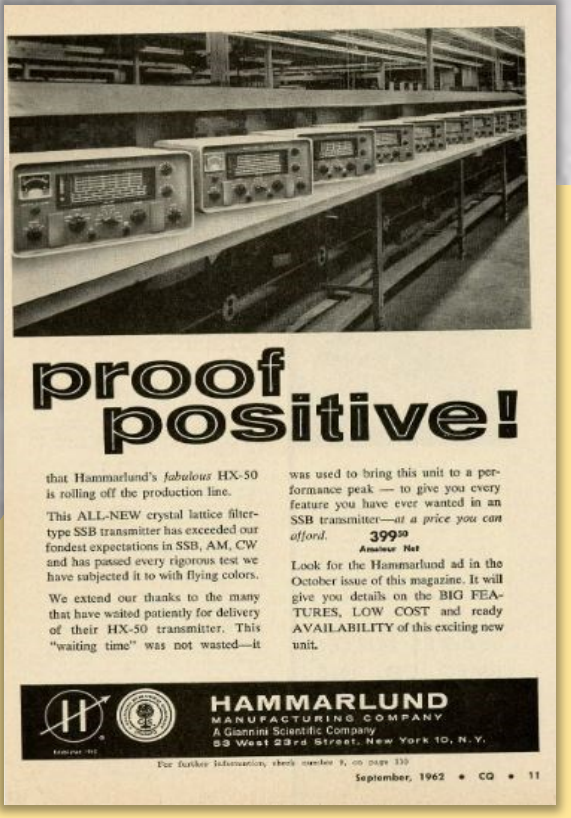
three crystal sockets for precise frequency control. That was common as well in this era, for being precisely on frequency for a net operation. While the transmitter's built-in VFO had a stability better than 250 cycles per second, it was still an analog dial so crystal control would allow for precise setting of frequency. It also allowed the HX-50 to be used by Novice class operators of the era, who were "rock bound" and had to use crystals as well as a power level of 75 watts input, or roughly half that for output power, which would be easy to dial in on the HX-50.

AM operation was not the greatest on the HX-50, being derived from one of the sidebands plus a carrier, rather than try plate or screen modulation. That resulted in a fairly low-grade AM signal, often described by modern users as restrictive, and narrow sounding. On SSB performance is considerably better, although still reported by many users as narrow—it's at least close to what most hams will expect an SSB signal to sound like today.

In my research, I've found that most collectors today who own an HX-50 pair it up with either a Hammarlund HQ-170 ham-bands-only receiver or an HQ-180 shortwave receiver. Either would have been a matching setup for the HX-100 but not cheap! The HQ-180 is considered to be the top of the line from Hammarlund by most hams who are into the old rigs.

So that's it for the Museum column for this month.

—Dave W7UUU



proof positive!

that Hammarlund's *fabulous* HX-50 is rolling off the production line.

This ALL-NEW crystal lattice filter-type SSB transmitter has exceeded our fondest expectations in SSB, AM, CW and has passed every rigorous test we have subjected it to with flying colors.

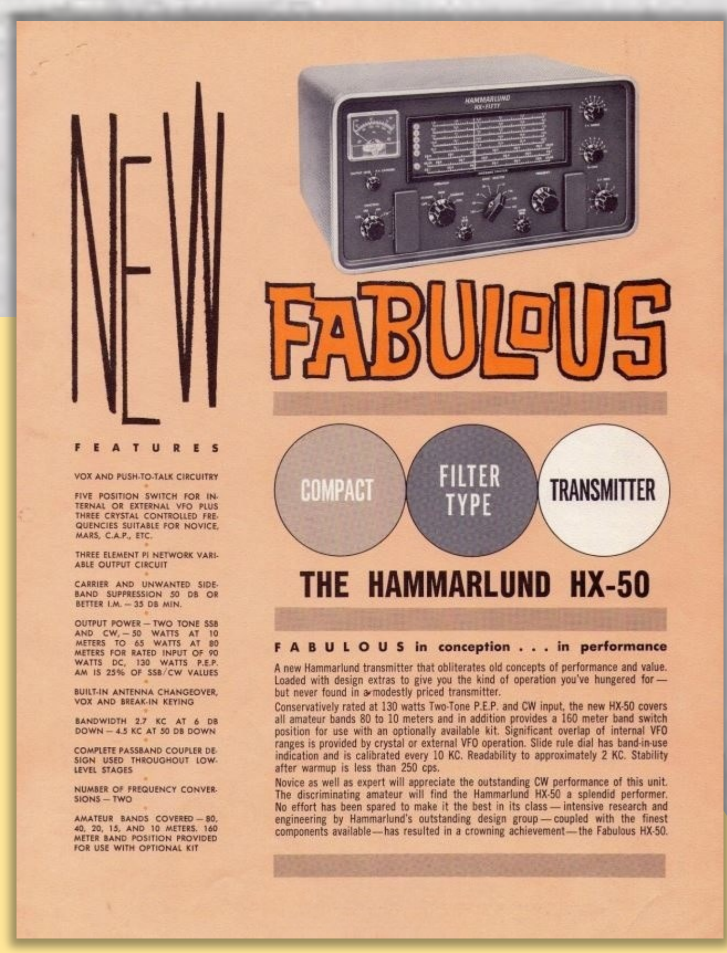
We extend our thanks to the many that have waited patiently for delivery of their HX-50 transmitter. This "waiting time" was not wasted—it was used to bring this unit to a performance peak — to give you every feature you have ever wanted in an SSB transmitter—*at a price you can afford.* 399.50 Amateur Net

Look for the Hammarlund ad in the October issue of this magazine. It will give you details on the BIG FEATURES, LOW COST and ready AVAILABILITY of this exciting new unit.

HAMMARLUND
MANUFACTURING COMPANY
A Giannini Scientific Company
53 West 23rd Street, New York 10, N.Y.

For further information, check number 9, on page 110

September, 1962 • CQ • 11



NEW

FABULOUS

COMPACT FILTER TYPE TRANSMITTER

THE HAMMARLUND HX-50

FEATURES

VOX AND PUSH-TO-TALK CIRCUITRY

FIVE POSITION SWITCH FOR INTERNAL OR EXTERNAL VFO PLUS THREE CRYSTAL CONTROLLED FREQUENCIES SUITABLE FOR NOVICE, MARS, C.A.P., ETC.

THREE ELEMENT PI NETWORK VARIABLE OUTPUT CIRCUIT

CARRIER AND UNWANTED SIDEBAND SUPPRESSION 50 DB OR BETTER I.M. — 35 DB MIN.

OUTPUT POWER — TWO TONE SSB AND CW, — 50 WATTS AT 10 METERS TO 65 WATTS AT 80 METERS FOR RATED INPUT OF 90 WATTS DC, 130 WATTS P.E.P. AM IS 25% OF SSB/CW VALUES

BUILT-IN ANTENNA CHANGEOVER, VOX AND BREAK-IN KEYING

BANDWIDTH 2.7 KC AT 6 DB DOWN — 4.5 KC AT 50 DB DOWN

COMPLETE PASSBAND COUPLER DESIGN USED THROUGHOUT LOW-LEVEL STAGES

NUMBER OF FREQUENCY CONVERSIONS — TWO

AMATEUR BANDS COVERED — 80, 40, 20, 15, AND 10 METERS. 160 METER BAND POSITION PROVIDED FOR USE WITH OPTIONAL KIT

FABULOUS in conception . . . in performance

A new Hammarlund transmitter that obliterates old concepts of performance and value. Loaded with design extras to give you the kind of operation you've hungered for — but never found in a modestly priced transmitter.

Conservatively rated at 130 watts Two-Tone P.E.P. and CW input, the new HX-50 covers all amateur bands 80 to 10 meters and in addition provides a 160 meter band switch position for use with an optionally available kit. Significant overlap of internal VFO ranges is provided by crystal or external VFO operation. Slide rule dial has band-in-use indication and is calibrated every 10 KC. Readability to approximately 2 KC. Stability after warmup is less than 250 cps.

Novice as well as expert will appreciate the outstanding CW performance of this unit. The discriminating amateur will find the Hammarlund HX-50 a splendid performer. No effort has been spared to make it the best in its class — intensive research and engineering by Hammarlund's outstanding design group — coupled with the finest components available — has resulted in a crowning achievement — the Fabulous HX-50.

W7DK Field Day 2024

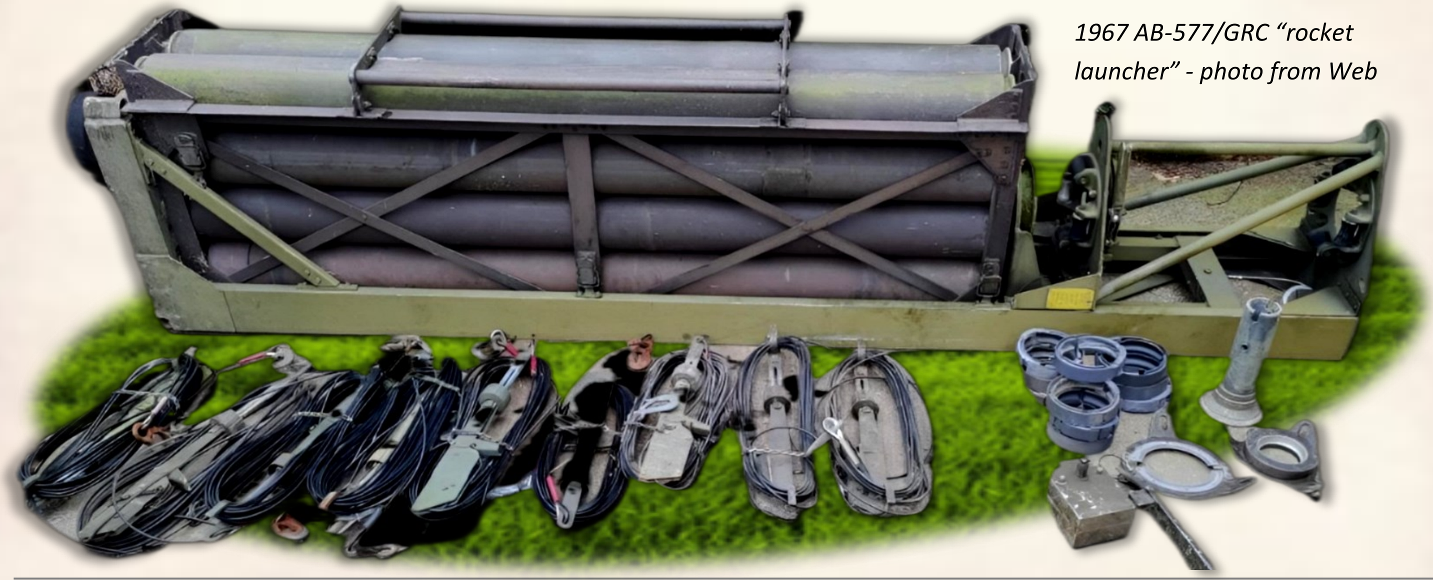
ROCKET LAUNCHER PRACTICE SESSION!

ON SUNDAY JUNE 9th, Field Day Director Mike W7MKE arranged for the Rocket Launcher team to converge on the South meadow of the W7UUU QTH out in Burley, WA. The mission was to practice setting up and installing two 1967-era military surplus [AB-577/GRC portable mast and tower assemblies](). These are actually fairly common in ham radio circles, frequently used for Field Day and other portable operations. Originally designed for microwave antenna use, they adapt very easily to support Yagis and other antennas for ham use, up to a working height of 40 feet (higher is possible, with some caveats). They are called "rocket launchers" simply because that's what they look like! See photo below… the 8 tube sections that assemble into the mast to some degree resemble large artillery shell casings or rockets.

Photo: Dave W7UUU

The crew, left to right: Dave W7GEL, Paul N7OSS, Joe KG7ZYB, Dan KD7SV, Doug AB7DG, Mike W7MKE, and Jeff KK7PRJ.

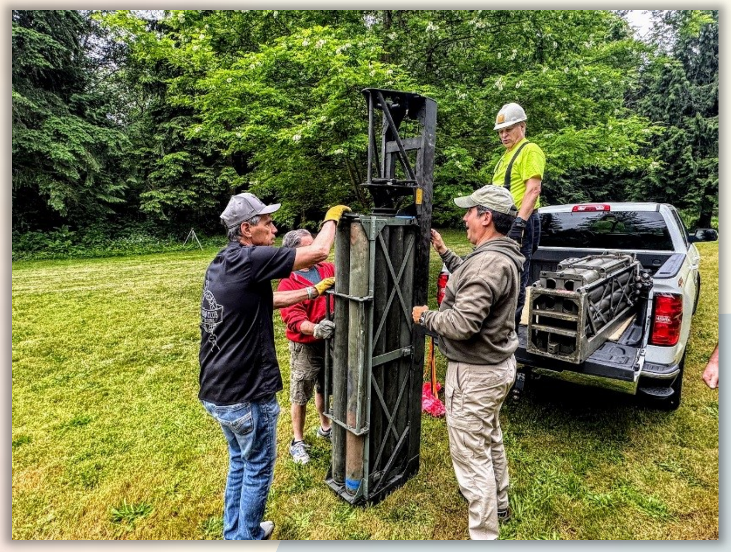
The photos that follow on the next three pages document many of the steps it takes to assemble a rocket launcher, always with safety in mind for the members of the crew *–Dave W7UUU*



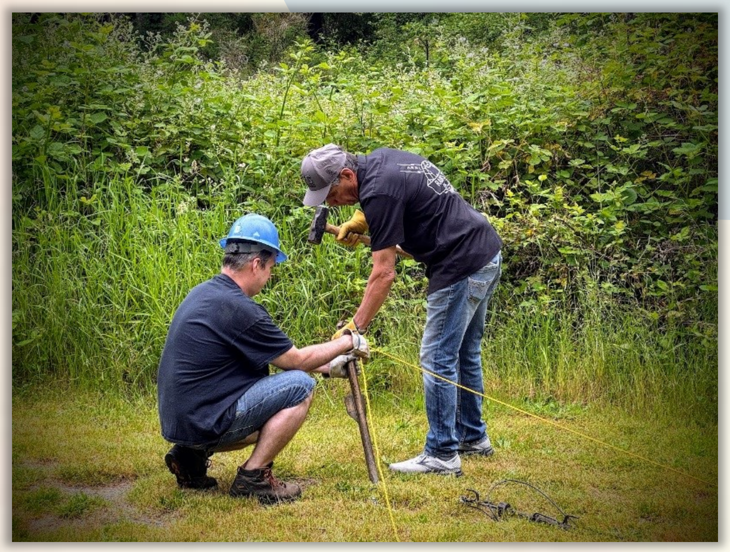
1967 AB-577/GRC "rocket launcher" - photo from Web

W7DK Field Day 2024

ROCKET LAUNCHER PRACTICE SESSION!

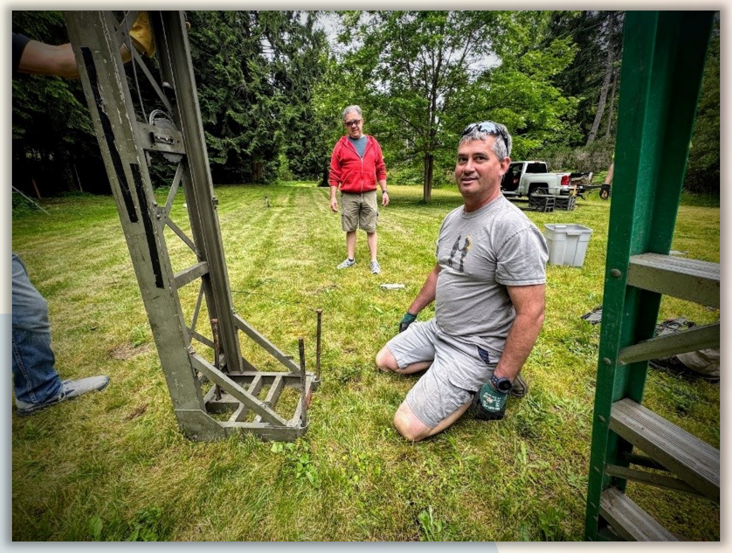


Unloading the first of two units from the truck. This one was unknown and needed to be checked out. Launcher team leader Dan KD7SV explains the system to all

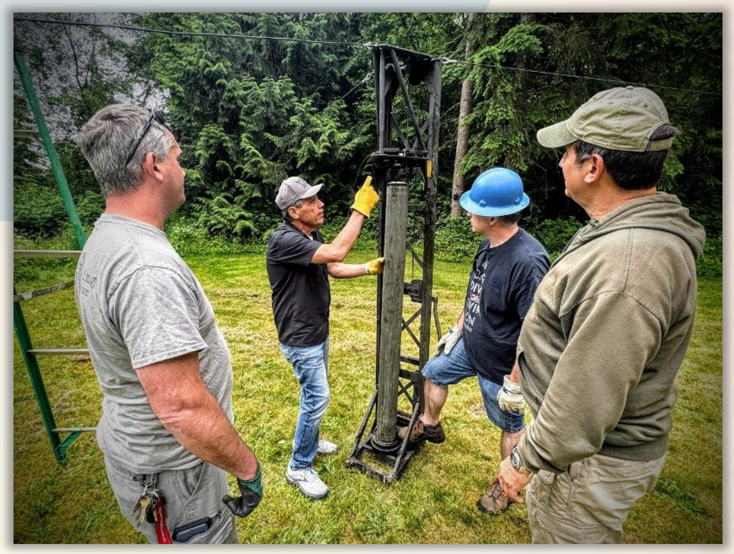


After calculating the requisite 120-degree anchor points (the yellow rope), Dave W7GEL assists launcher team leader Dan KD7SV in driving the guy anchor stakes

All photos this page by Dave W7UUU

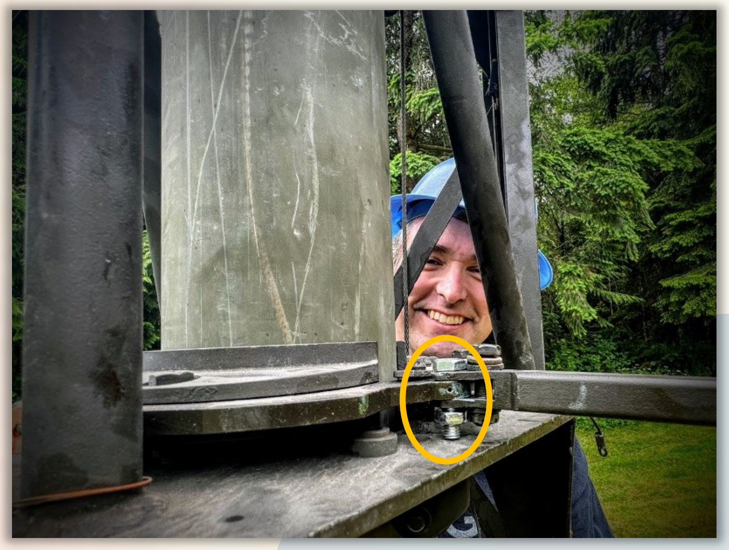


Jeff KK7PRJ (gray shirt) gets ready to drive the anchors to hold the rocket launcher base into the earth while Joe KG7ZYB watches on to visually sight for level



Team leader Dan KD7SV (yellow gloves) explains every aspect of operation of the rocket launcher system. He's a former 757 pilot with an engineering background and truly knows his stuff in setting these systems up

ROCKET LAUNCHER PRACTICE SESSION!



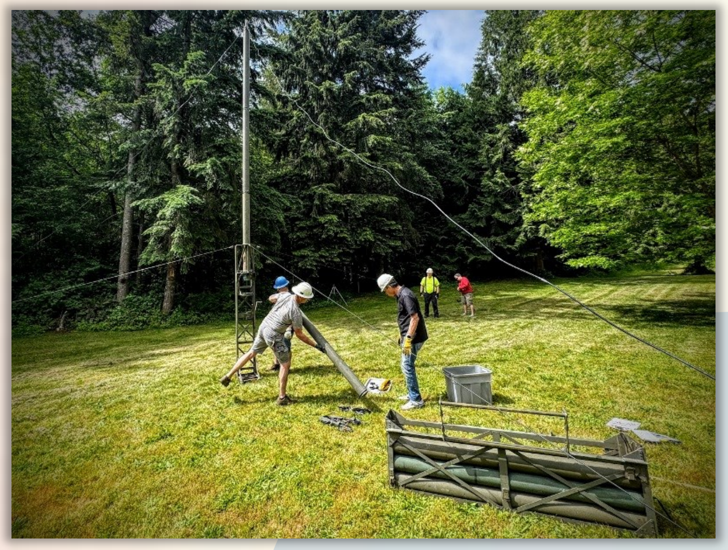
The moment that Dave W7GEL and the group realized the silver bolt in launcher #1 is not right and won't work! It's too big and won't allow the tube latch to lock down

Aligning a tube and preparing to latch it in place
L to R: Jeff KK7PRJ, Dave W7GEL, Paul N7OSS

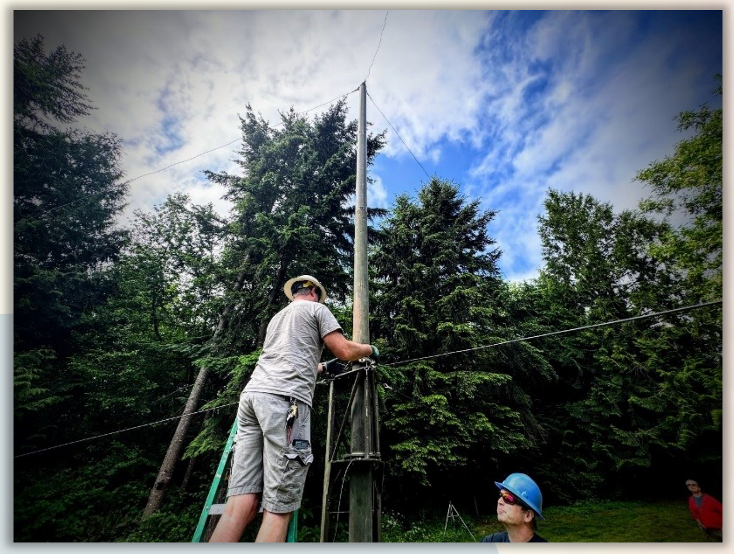
Jeff KK7PRJ tightly latches the next tube in place while Dave W7GEL monitors the crank tension to pull it up

The final mast tube for this test is cranked into position by Dave W7GEL as the team watches

All photos this page by Dave W7UUU



Jeff KK7PRJ (gray shorts) helps load the last tube for this test, to bring the mast to 20 feet and 2nd tier of guy lines



Jeff KK7PRJ locks in the last tube for this test, while the 2nd tier of guy lines is pulled taught by team members out of view in this shot. Dave W7GEL looks on

All done and packing it in. Paul N7OSS (cap) and Jeff KK7PRJ (hardhat) team up to carry the launcher back to the truck

Final load-in to the pickup… Paul N7OSS (left) and Jeff KK7PRJ (right) do the honors before strapping it all down

All photos this page by Dave W7UUU

W7DK FIELD DAY 2024

HOW WE DID!!!

FIELD DAY 2024 is now in the history books! And this year turned out to be a pretty good one for the club!

In all we had 22 operators, one of whom was a youthful guest operator who is not yet licensed (but of course had a control operator at hand).

W7DK worked all US ARRL Sections except for VI (US Virgin Islands). Of the Canadian sections, we missed PE (Prince Eduard Island) and NB (New Brunswick)… so fell only three sections short of a Clean Sweep!

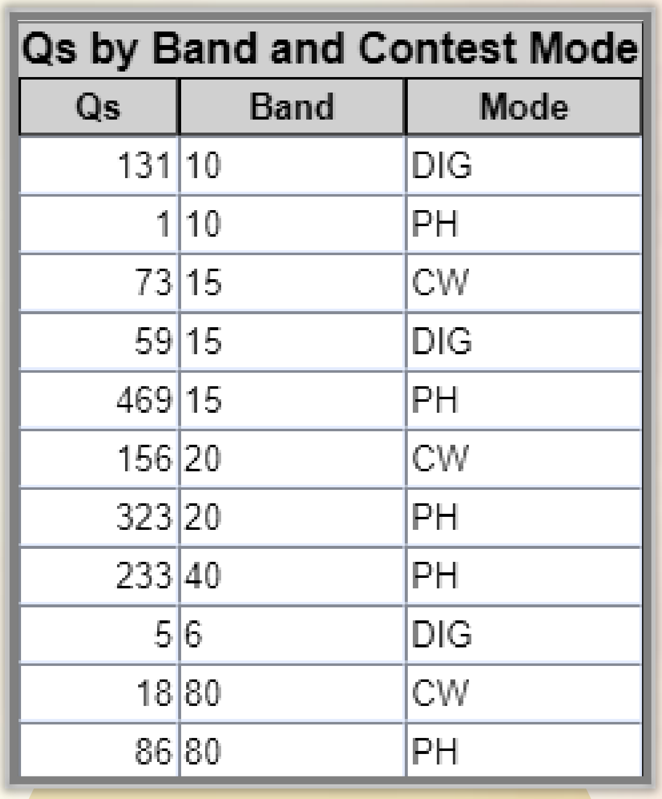
The club operated as a class 4A, with a VHF station as well. Antennas were: 80/15m cage dipole, 40m full-size 3-element wire Yagi between trees, 5-element 10m Yagi, 5-element 15m Yagi, and a 3-element 20m Yagi. All three Yagis were installed on 1967 military surplus AB-577/GRC "Rocket Launcher" 40 foot portable towers. For those not familiar, there's an article in this edition of The Logger's Bark on page 40 showing such a device and how it gets set up.

15 meters was the most productive band, affording 73 CW contacts, 59 digital, and a whopping 469 in Phone (SSB) for a total of 601 on the band.

Our grand total was 1554 contacts for the event, which was 172 more than last year.

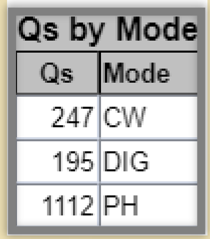
Thanks to all from the club who helped in any way to make all of this possible.

■ *-editor*



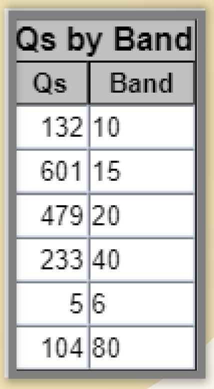
Qs by Band and Contest Mode

Qs	Band	Mode
131	10	DIG
1	10	PH
73	15	CW
59	15	DIG
469	15	PH
156	20	CW
323	20	PH
233	40	PH
5	6	DIG
18	80	CW
86	80	PH



Qs by Mode

Qs	Mode
247	CW
195	DIG
1112	PH



Qs by Band

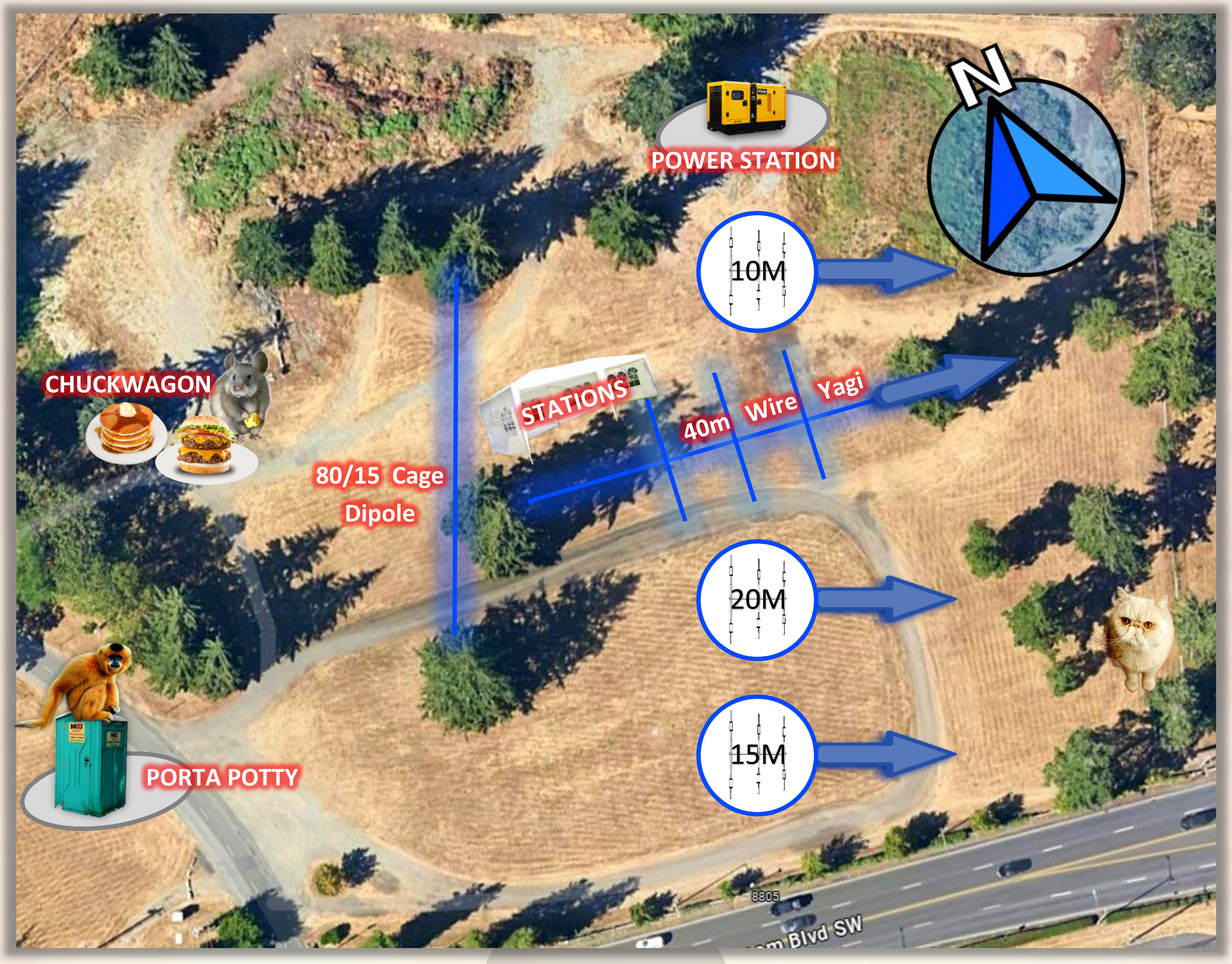
Qs	Band
132	10
601	15
479	20
233	40
5	6
104	80

Photo by W7MKE

W7DK FIELD DAY 2024

HOW WE DID!

W7DK



Radio Club of Tacoma W7DK 2024 *ACTUAL* Field Day Site Plan

WESTERN STATE HOSPITAL—LAKEWOOD, WA

RETURN TO HOME PAGE

W7DK FIELD DAY 2024

HOW WE DID!

Cast & Crew

STATION MASTERS: We'll have a 4A operation.

80/15	Dan Vacanti *KD7SV* Flex 6500
40M	Ellen Hardin *AI7FP* Flex 6400M
20M	Mike Mikuchonis *W7XTZ* IC-756 Pro III
10M	Gary McAdams *WG7X* IC-7410

ROCKET LAUNCHER CREW: 3 rocket launchers

Dan Vacanti *KD7SV* Lead
David Asher *W7GEL*
Evan Moyer *KI7ZEW*
Paul Nosal *N7OSS*
Kerry Harris *KI7LTV*
Joe Kubistek *KG7ZYB*
Jeff Winget *KK7PJR*

SAFETY OFFICER

Doug Schafer *AB7DG*

LOGGING/NETWORKING: Practice May 23 at RCT.

Randy Myers *WB4SPB*

PUBLICITY/PROMOTION

Deanna Jenks *KA7DCX*
PSA on radio KTQA 5/20 @6pm

KITCHEN

Paul Matney *WPFU*
Red Cranefield *WB7EC*

ANTENNA ASSEMBLY: 10, 15, 20M Yagis

Steve Dightman *AF7YD*
Randy Rumley *KK7RHL*
Jordan *W3NTA*

TENT SETUP

Doug Reynolds *K7FDR*
John Wheeler *KA7RMG*
John Buonora *KJ7SJM*
David Stilwell *AC7KP*

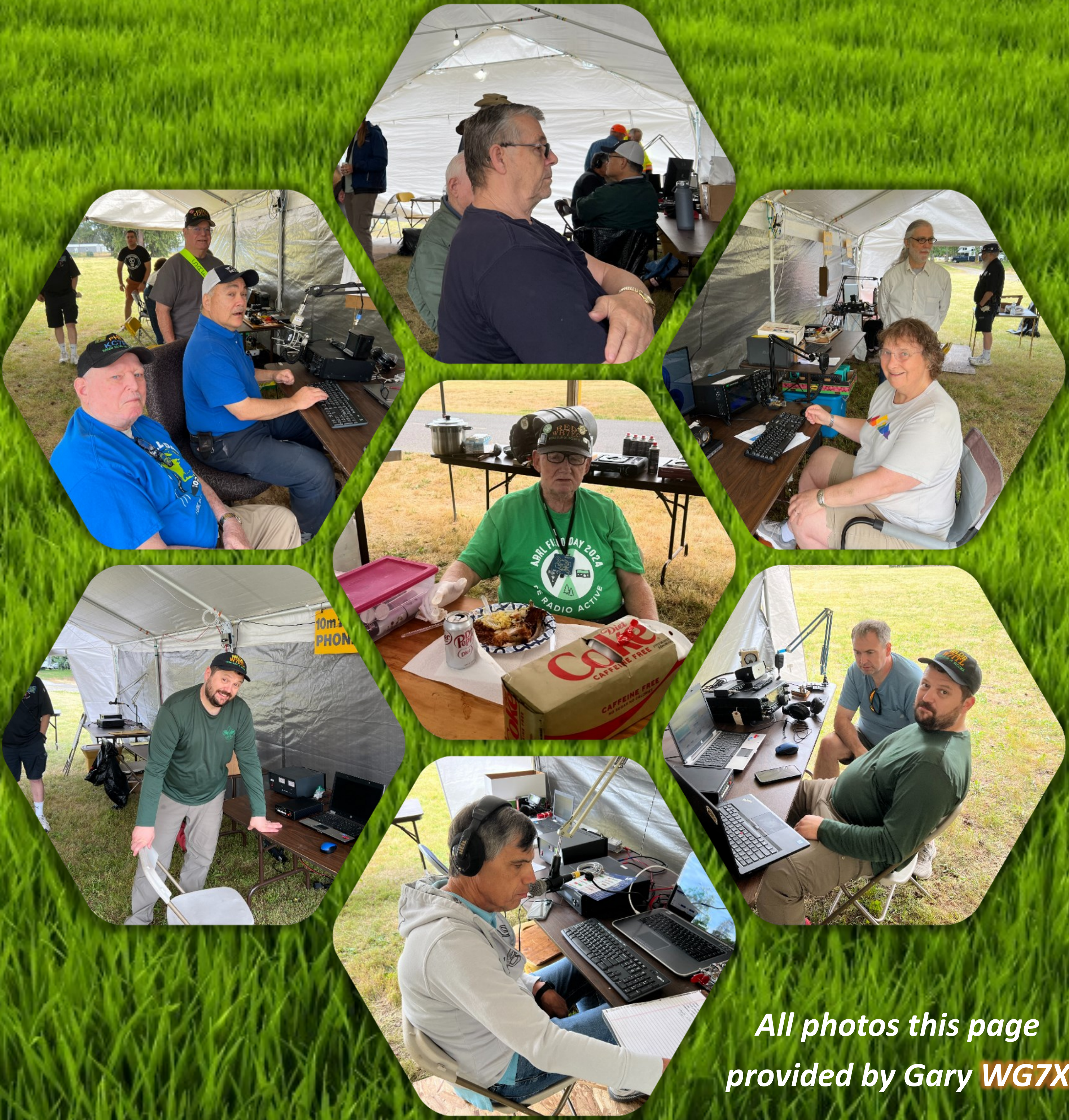
TRANSPORTATION

Brad Cullen *WA7BTC*
Mike Drorbaugh *W7MKE*

WESTERN STATE HOSPITAL—LAKEWOOD, WA

W7DK FIELD DAY 2024

PHOTO GALLERY!



All photos this page provided by Gary ***WG7X***

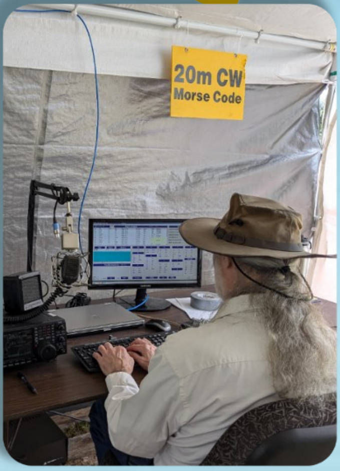
W7DK FIELD DAY 2024

PHOTO GALLERY!

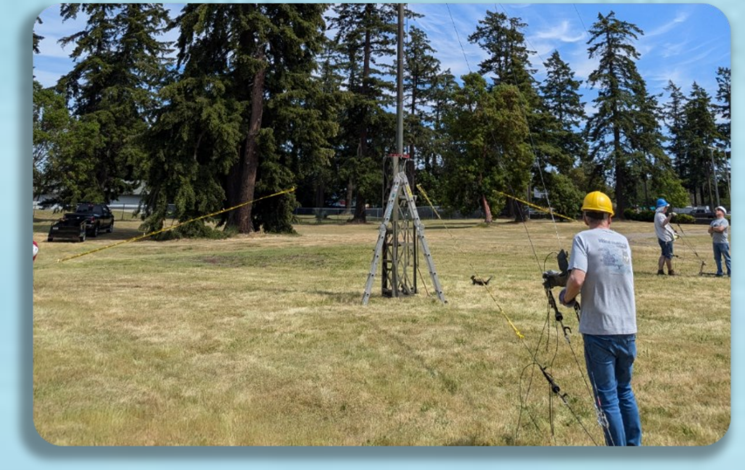
*All photos this page provided by Kathryn **K7USR***

W7DK FIELD DAY 2024

PHOTO GALLERY!



This photo saved us two bucks!!



All photos this page provided by John KJ7SJM

W7DK FIELD DAY 2024

PHOTO GALLERY!

All photos this page provided by Adam ***W2NCC***

W7DK FIELD DAY 2024

PHOTO GALLERY!

*All photos this page provided by Dave **W7UUU***

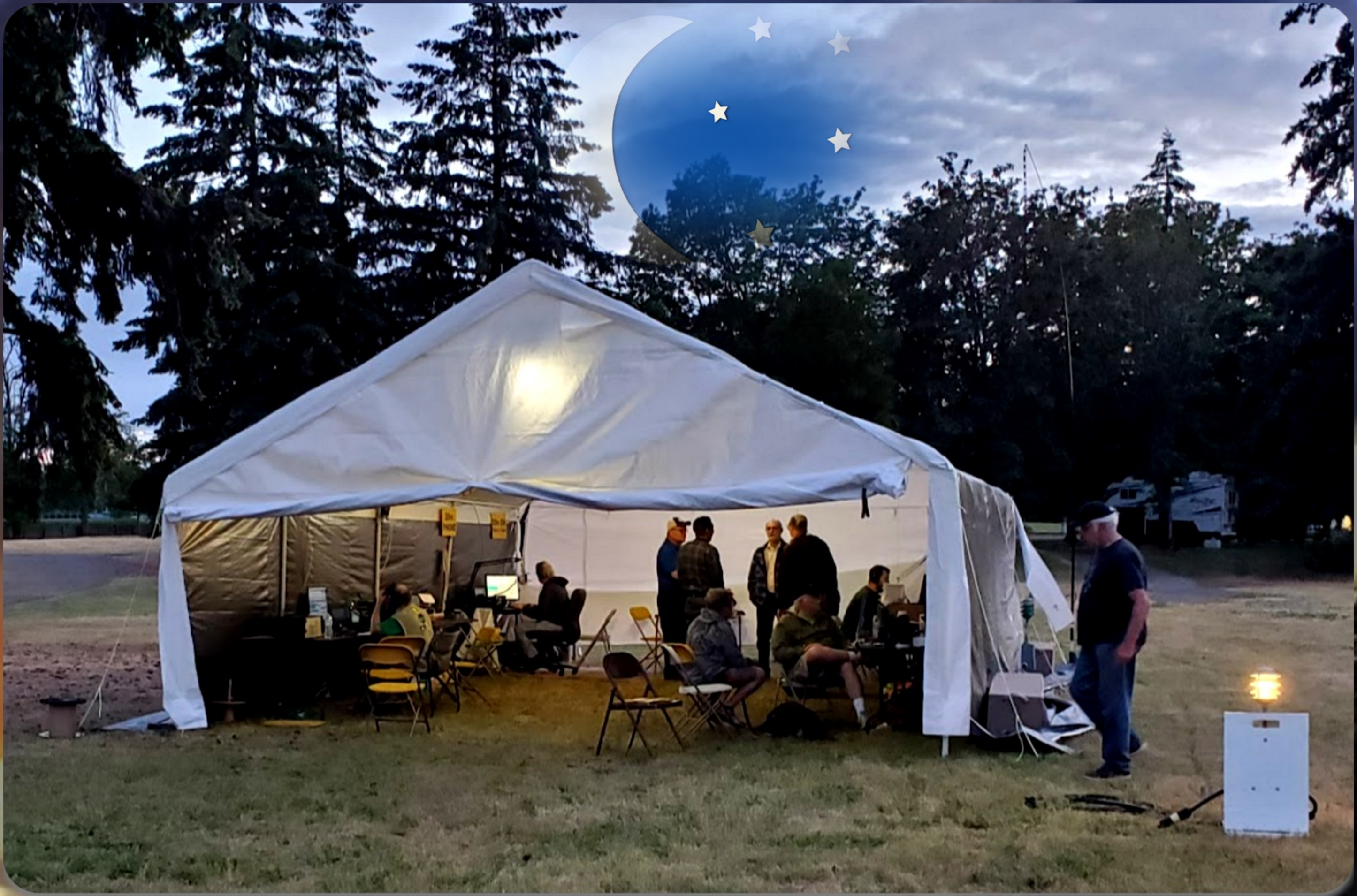
W7DK FIELD DAY 2024

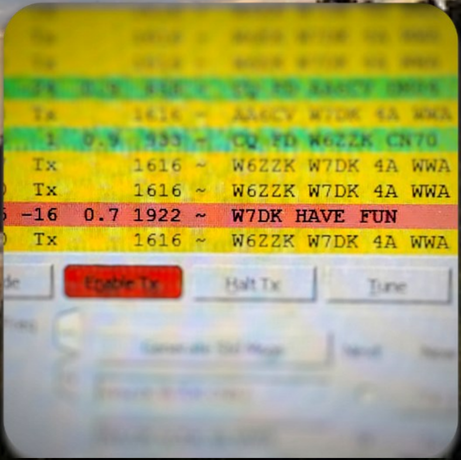
PHOTO GALLERY!

All photos this page provided by Mike ***W7MKE***

W7DK FIELD DAY 2024

PHOTO GALLERY!





```
  Tx        1616 ~  AA6CY W7DK 4A WWA
   1  0.9   933 ~  CQ FD W6ZZK CN70
  Tx        1616 ~  W6ZZK W7DK 4A WWA
  Tx        1616 ~  W6ZZK W7DK 4A WWA
 -16  0.7  1922 ~  W7DK HAVE FUN
  Tx        1616 ~  W6ZZK W7DK 4A WWA
```

*All photos this page provided by Mike **W7MKE***

W7DK FIELD DAY 2024

PHOTO GALLERY!

Randy WB4SPB running the “solar powered (charged) QRP station”

Sharon and Steve AD7VL

The gang’s all here! L>R: Gary WG7X, David AC7KP, Adam W2NCC, Mike W7MKE and President Mike W7XTZ

Always chipper with a smile for anyone, Mike W7MKE

All photos this page provided by Dave W7UUU

W7DK FIELD DAY 2024

PHOTO GALLERY!

Adam W2NCC using his spectrum analyzer to sort out a suspect bandpass filter

Dan WD7SV taking a break in operation

Leonard KA7NWF sporting his vest adorned with past Field Day patches and pins

Joe KG7ZYB and Stormy

All photos this page provided by Dave W7UUU

W7DK FIELD DAY 2024

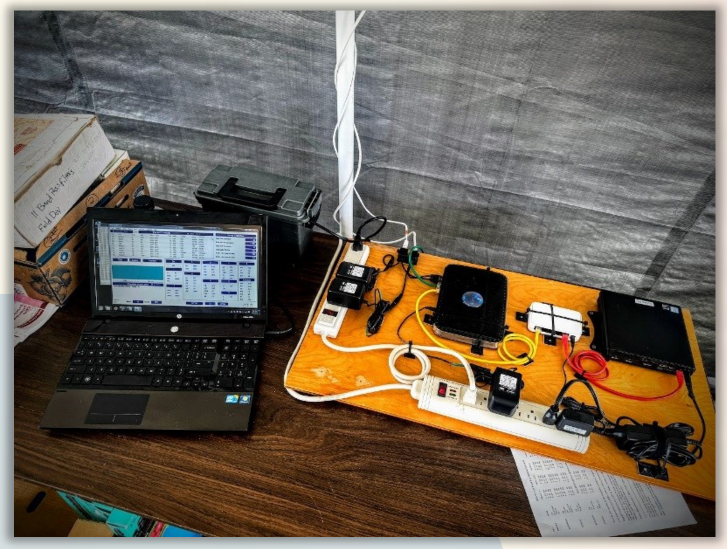
PHOTO GALLERY!

All photos this page provided by John N7TES

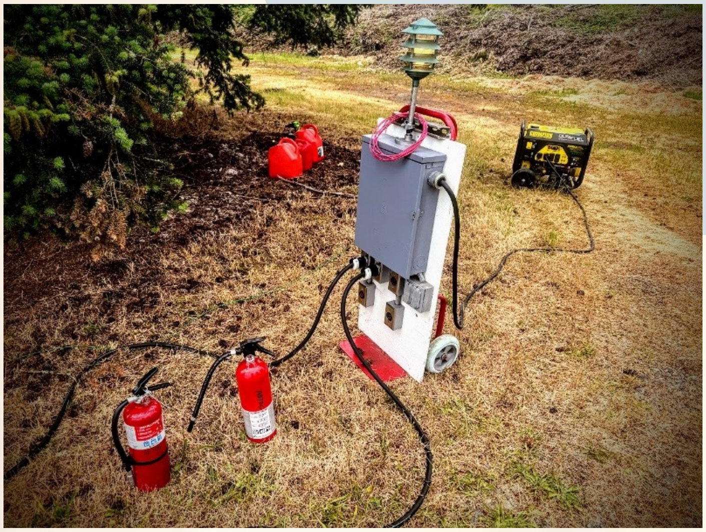
W7DK FIELD DAY 2024

PHOTO GALLERY!

IT Manager Randy WB4SPB checking status on the FD site-wide logging system



Closer view showing the networking arrangement to feed all contacts into the site server log



The power generation and distribution system for the entire site

Leah K7IPT and Dan KD7SV in operation

All photos this page provided by Dave W7UUU

W7DK FIELD DAY 2024

PHOTO GALLERY!

Chuckwagon Master Paul W7PFU wraps the BBQ ribs while waiting on the fried chicken!

Red WB7EC, Second in Command of the Chuckwagon, waits on the ribs with Paul W7PFU

Patiently awaiting the Master Chefs to work their magic in the Chuckwagon

Chuckwagon and dining tents

All photos this page provided by Dave W7UUU

W7DK FIELD DAY 2024

PHOTO GALLERY!

2m Winlink antenna & station

20m Yagi left, 15m Yagi right, on "Rocket Launcher" towers

10m Yagi on "Rocket Launcher"

All photos this page provided by Dave ***W7UUU***

W7DK FIELD DAY 2024

PHOTO GALLERY!

All photos this page provided by Nathan KK7QND

N7PP FIELD DAY 2024

NICK K7MO'S FD GROUP: THE SOUTH HILL CONTEST CLUB!

W7DK

Frequent contester Eric N7EPD

Rev. Dr. Doug Oakman AD7AV

Nick K7MO left, Dick K7BTW

Dick K7BTW

N7PP FIELD DAY 2024

NICK K7MO'S FD GROUP: THE SOUTH HILL CONTEST CLUB!

W7DK

Nick Winter **K7MO**

On Generator power

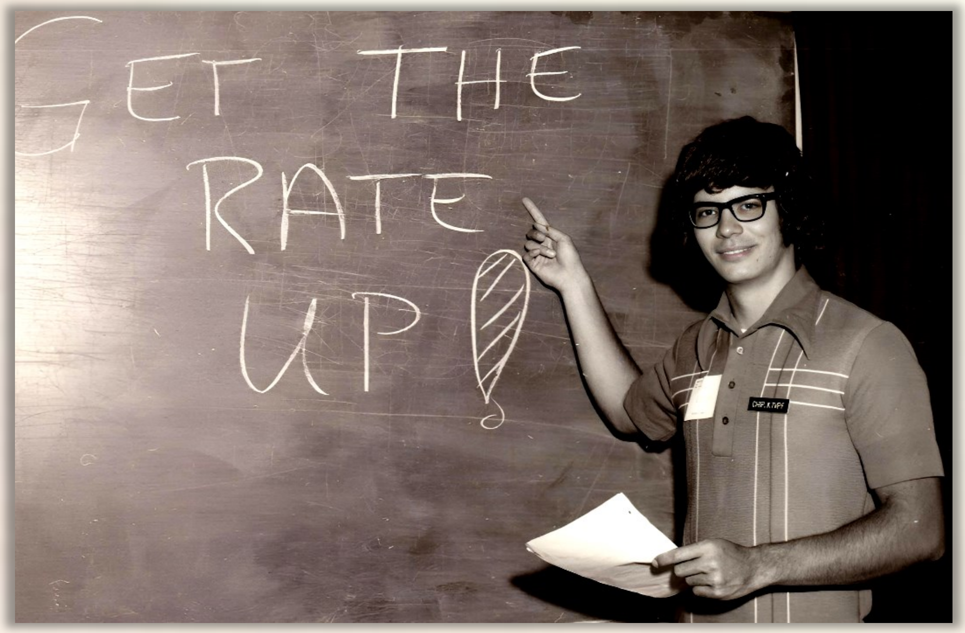
All photos this page provided by Dave ***W7UUU***

N7PP FIELD DAY 2024

NICK K7MO'S FD GROUP: THE SOUTH HILL CONTEST CLUB!

Chip Margelli, K7VPF and later K7JA (SK) was a member of W7DK for many years, and one of the most proficient CW operators of the modern ham era. His mantra for club contest CW events was "Get the rate up". So this year, Nick K7MO, longtime friend of Chip's, dedicated his Field Day event to Chip with signs at each operating position with Chip's slogan. And of course for snacks, he offered chips!

Top: *Chip with wife Janet KL7MF*
Bottom*: K7JA on the Jay Leno show "Morse Code vs. Texting" Click photo to see the short video clip on YouTube*


GET THE RATE UP!

MIGHTY DK! QSO REPORT

Reporting all the HF QSO action from the club

EACH MONTH in the Bark, the Radio Club of Tacoma recognizes the members and guests who have made non-contest QSOs using the HF stations at our clubhouse. Saturday Open House, especially, is a time when members have access to this equipment. Why not sit down at one of our operating desks and make a contact or two? Assistance is almost always available for those unfamiliar with the equipment, and if your license class doesn't permit HF operation, ask the denizens of the HF Room or the Saturday clubhouse host to help you find a suitably-licensed control operator to sit with you. It's a feather in the club's hat for the call sign of The Mighty DK to be heard on the airwaves. So get on the air and get your name in the Bark! (Don't forget to *enter your call sign* as the operator into our logging program.) ■ *-editor*

Above: The IC-7610 station ready to roll on June 15th, awaiting operators

Below: Gary WG7X (glasses) and Mike W7MKE (hat) sort out Flex & Mercury amplifier settings on June 29th

Clubhouse QSOs during this period:

NAME	CALL	QSOs
Mike	W7XH	68
Mike	W7MKE	21
Walt	WA7SDY	1
n/a	n/a	n/a
n/a	n/a	n/a
n/a	n/a	n/a

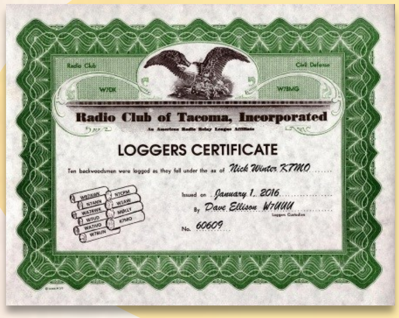
Photos this page provided by

W7DK LOGGER'S CERTIFICATE

Classic "first award" for Members

HAVE YOU APPLIED for your own W7DK Logger's Certificate?! It's FREE and it's EASY! All you have to do is work at least 10 members of the Radio Club of Tacoma, then send in your list of call signs worked, and BAM! We'll print out your certificate and get it to you toot sweet by US Mail.

There are no confirmations required—no logs to submit—and really no rules other than the call signs you submit must be members of the club. You may work them on HF, 2m FM, on FT8 or SSB or any other mode! In fact, one of the best ways to get your 10 contacts is to check into the weekly Tuesday Night Net on the 147.28 club repeater… every Tuesday at 7:30 PM.



Radio Club
W7DK
Civil Defense
W7BMG

Radio Club of Tacoma, Incorporated
An American Radio Relay League Affiliate

LOGGERS CERTIFICATE

Ten backwoodsmen were logged as they fell under the ax of Nick Winter K7MO

Issued on January 1, 2016
By Dave Ellison W7UUU
Loggers Custodian
No. 60609

This venerable award was first launched in 1957, using certificate paper printed by club member Dick Ryan, W7RGD using a donated printing setup.

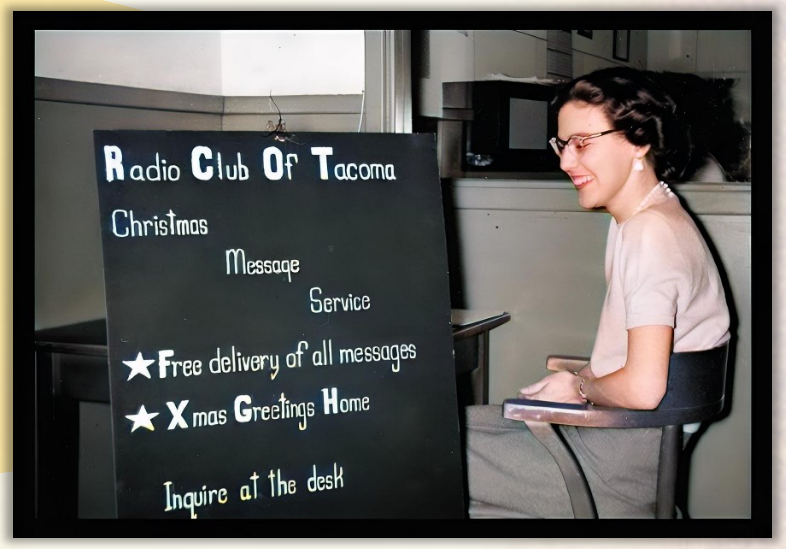
As of the date of this publication, there have been almost 700 certificates issued, including a few reissues over the years to replace lost certificates.

The original certificates were hand-lettered by long-time RCT member Barbara Osborne, W7UYL (SK 2022), and all of the records were kept in a series of recipe boxes still held by the club.

Wanna get yours? Send in those contacts!

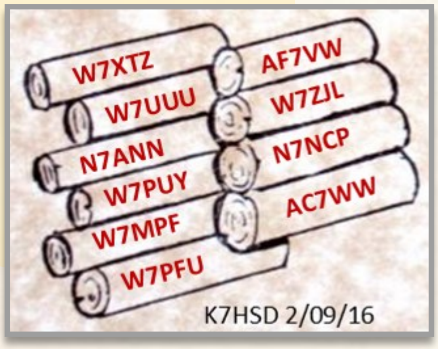
We still have a huge stash of this beautiful OFFICIAL logger's Certificate paper…. So if you do not already have yours, just shoot us an email with your list of call signs worked, and put "Logger's Certificate" in the subject line…

Send to loggersbark@gmail.com



Barbara Osborne W7UYL ca. 1955 at an RCT USO event

We also issue "Log Piles" for endorsements of each group of ten additional stations worked! So don't hesitate—get your Logger's Certificate or Log pile Endorsement *today!*



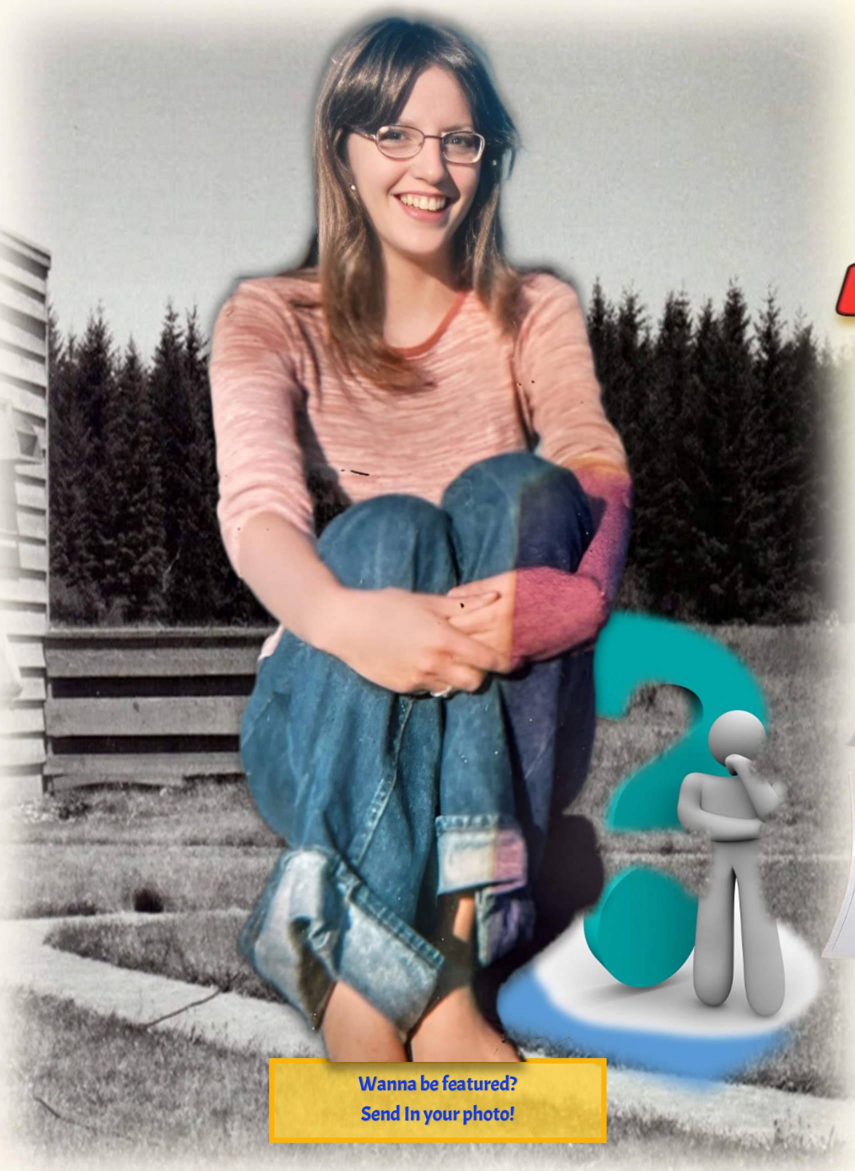
THE WAY BACK PHOTO BOOTH

Highlighted photos from the club's past

Researched & Compiled by the Editor

Photo:
Jim W7LS

WHO IS THIS MYSTERY MEMBER?



Wanna be featured?
Send In your photo!

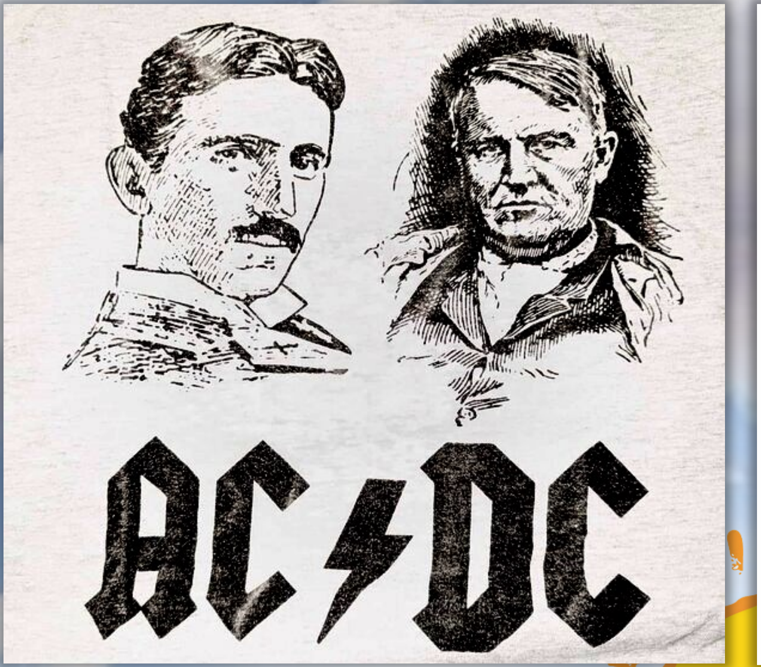
If you think you know who our Mystery Member is, just send an email with your guess… first correct responder will win a

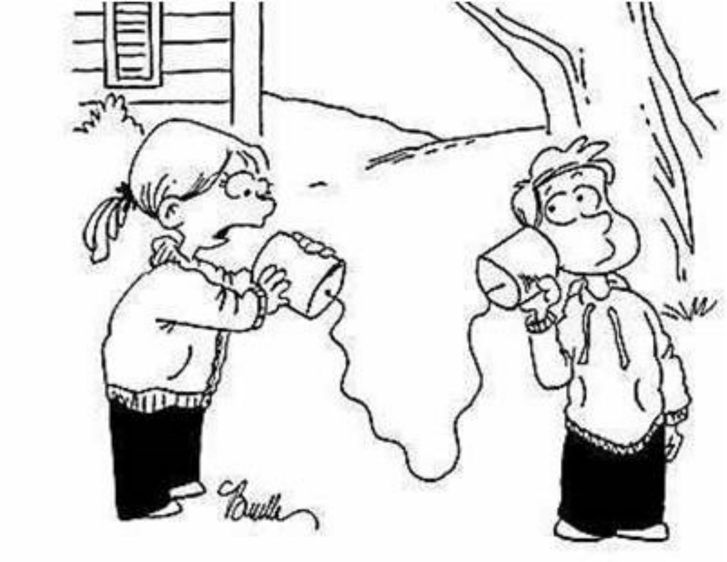
FREE QRZ Bumper Sticker!

Mailed right to your door!

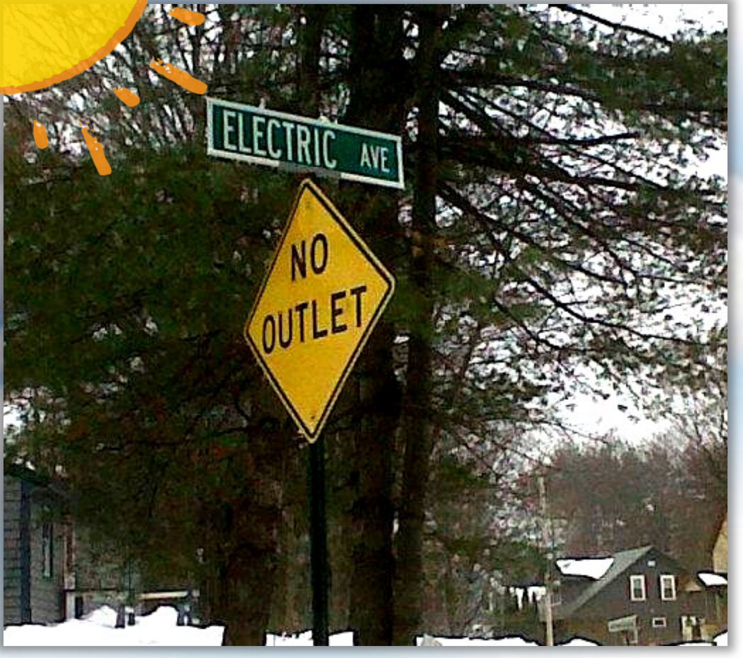
THE FUNNY PAPERS

Ham Humor for Humorous Hams





"DAH DIT DAH DIT DAH DAH DIT DAH"

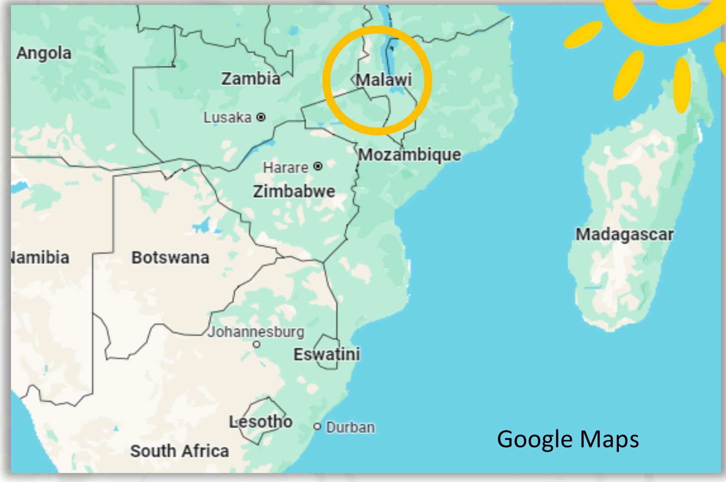


Got a ham radio funny? Send it in!!

HOW'S DX?

DXpeditions and Notable DX operations

Photo & Text: ***Pablo Varela***



FROM DXNEWS.com:

The 7Q7MW DXpedition team will be active from Malawi towards the end of October, 2024. The team will consist of operators: EA7FTR, CT1BOL, 7Q6M, 7Q7CT and will be operating on all the HF bands using CW, SSB and FT8. They will also participate in the CQWW DX SSB contest October 26-27. More information will be posted soon on the 7Q7MW QRZ page.

ABOUT MALAWI:

Pablo says: "Malawi is a small state, lost on the map among Mozambique, Tanzania and Zambia, located in the eastern part of the African continent. This country is not washed by the ocean and sea, but its lands are unusually bright, rich in natural beauty, covered with wild trails, which are mastered by few tourists.

In fact, tours to Malawi are not offered by most tour operators because the country is not considered a particularly prime tourist destination. However, those who love breathtaking nature, beautiful views and fabulous hiking paths, along the way of which you can see a lot of interesting things, such a trip will be remembered for a long time.

CLIMATE:

The climate in Malawi is equatorial monsoon with wet summer and dry winter seasons. The wet season starts in mid to late October and lasts until the end of April. The dry starts in May and lasts until early November.

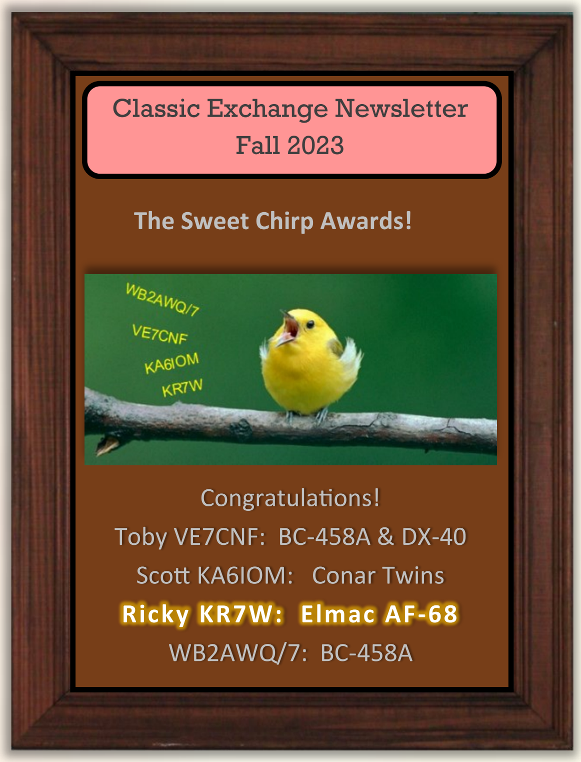
Precipitation mainly falls from November to March, when it is summer in the southern hemisphere. Rainfall is predominantly in the mountainous areas - there is 2-3 times more precipitation than in the plains. The temperature of the warmest month, November, can vary between 68 to 75F in the mountains and up to 80 or higher in the valleys. But in July things cool down to the mid-50s. July in fact is the coldest month of the year in Malawi".

Be watching the 7Q7MW QRZ page as well as DXnews.com for future updates.

-adapted from content at DXnews, W7UUU editor

STRAY TOPICS OF INTEREST

Fun stuff for Hams to read!



Classic Exchange Newsletter
Fall 2023

The Sweet Chirp Awards!

WB2AWQ/7
VE7CNF
KA6IOM
KR7W

Congratulations!
Toby VE7CNF: BC-458A & DX-40
Scott KA6IOM: Conar Twins
Ricky KR7W: Elmac AF-68
WB2AWQ/7: BC-458A

Bark editor embellishment of the original PDF version from Classicexchange.org

Many hams who appreciate Ye Olde rigs of the past already know about the Classic Exchange ham radio events. Conceived by Stu Stephens K8SJ (SK), Al Stephens N5AIT, and Bob Morgan K8RBV back in 1975, the event was originally aimed at only using the venerable Harvey-Wells Bandmaster transmitters.

The event grew in popularity over the decades to allow all sorts of classic old rigs—just about anything you can name has been used right up to this day.

It's now become something of a fun contest where participants try to put on the air as many combinations of old tube rigs as they can muster, with points assigned for multiple aspects of the gear being used.

One of the awards given is "Best Chirp" - and for the October 2023 event, one of the 4 winners was Rich Patrick, KR7W, running his Multi-Elmac AF-68 "Transciter" transmitter. ■ *-editor*

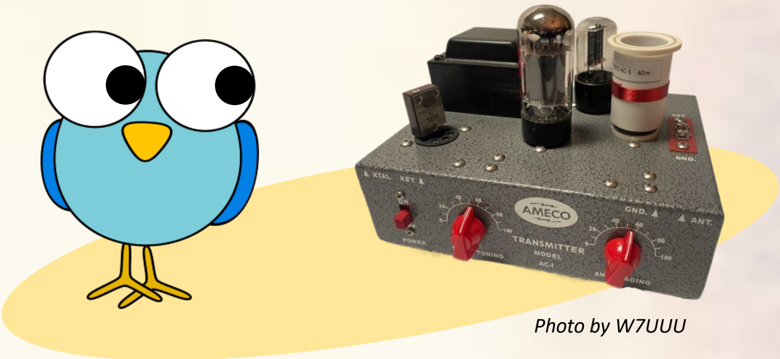


Photo by W7UUU

WHAT IS CHIRP?

IN THE WORLD OF HAM RADIO (and CW Morse Code operation specifically), chirp is defined as frequency instability during the time that the Morse Code key is closed during transmission. Rather than a nice pure musical sine wave, the tone heard on the receiving end of the QSO will increase or decrease in frequency on every dit and dah (dot and dash) that is sent. It's not unlike the chirping of a bird, hence the name. Sometimes, chirp can be so extreme as to cause the receiving end to fail to copy letters and words entirely.

The causes are many: poor power supply regulation of the transmitter, improper component choices in the oscillator, a bad crystal, or even just the fact the oscillator is being keyed on and off can lead to instability.

But for many old-timers, chirp is an endearing sound, taking the receiving operator back to his or her Novice days and simpler times. The slight chirp of an otherwise good CW note can even be attributed as "sweet" by some users, hence the award given every season by the Classic Exchange group. Most serious CW operators however find chirp to be pretty annoying when trying to copy signals, especially at higher speeds.

■ *-editor*

POTA / SOTA

Parks & Summits on the Air Activities

Dave W7UUU

Greg KT1A in the museum with his POTA kit

ON A RECENT SATURDAY at the clubhouse, I noticed that club member Greg KT1A was showing off his newly-built "go kit" upstairs in the club's W7OS museum room. It immediately drew my attention when I noticed the *amazing* workmanship of the build and the clever arrangement of transceiver, tuner, and interconnections within the kit.

Inside the sturdy Pelican carrying case is a nicely-mounted Yaesu FT-891 100w HF transceiver paired with a compact LDG Z-100Plus automatic antenna tuner. The top panel brings all required connections to solid terminations within easy reach. It really is very well done. So needless to say, I asked Greg if he wouldn't mind writing up his project for The Bark and he agreed. What follows is his story of how it came to be. While Greg built it as a "go kit", it's *totally* suitable for POTA work and Greg is happy to share the details of what all is inside.

-Dave W7UUU

MY RECENT ENTRY INTO becoming a ham started less than three years ago with a data breach at work that I was responsible for fixing. I work for a commercial electrical contractor. That incident turned into a conversation with my wife about emergency preparedness.

We both built "go bags" for our vehicles and discussed communications if cell phone coverage went away. After doing some research I decided to get my wife and I a GMRS call sign (WRVF722) and BTECH GMRS Pro radios. Additionally we both took the CERT class in Kent. On Friday nights there are Hams that have a ham study group. This piqued my interest, and down the rabbit hole I went!

Within a month I was looking for a place to take my test for technician. I tested in December of 2022 and passed to General that night. I also joined the Radio Club of Tacoma that evening. On Christmas Eve I was now KK7JTZ. My journey to General was in Dave Brooks, N7HTs General class at W7DK. He does such a fantastic job of making you learn the concepts and not just the answers.

A few months later I took the Extra test and passed. I got tired of Hams questioning me about my new call sign in the Extra portion of the bands, so I tried a couple of times and ended up as KT1A.

I love how ham radio is an endless source of in-depth learning. It is giving me new things to make my mind work and after all, that is what keeps us young! I vowed to myself I would not just learn to pass the test and move on, but rather go back and

POTA / SOTA

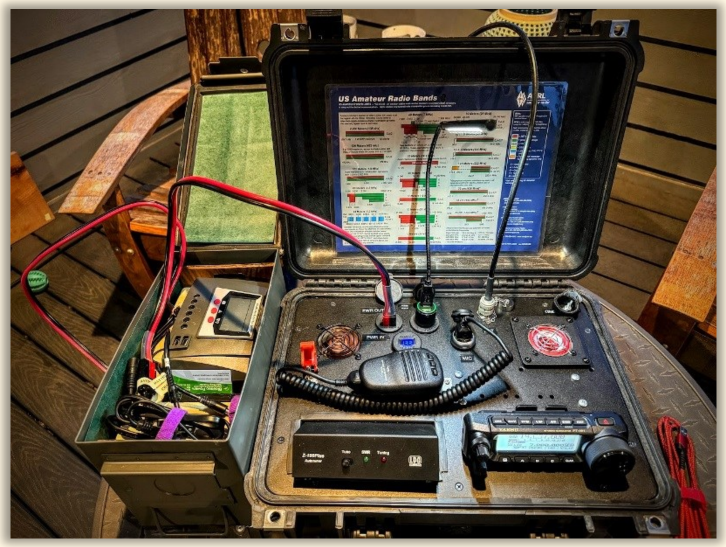
Parks & Summits on the Air Activities

Dave W7UUU

do a deep dive. I also wanted to put the things I learn to good use so I am now a member of the Puget Sound Fire Communication Support Team out of Station 74 in Kent.

Now for the box… After I passed to Extra, I upgraded my home station to a Yaesu FTDX10 and the FT-891 became my radio for the field. After taking it out to the field in pieces a few times I knew I had to do something to make it easier to pack and set up.

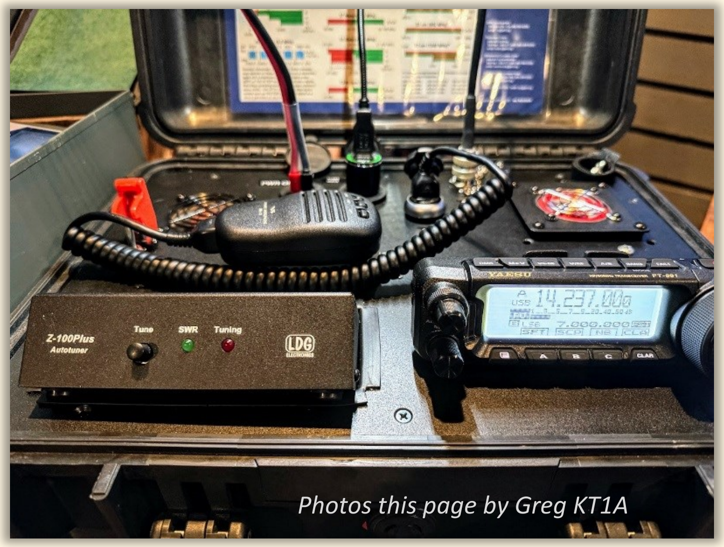
I had a Pelican case sitting in storage and my thoughts started to ponder how to make it all fit. I did a couple of mockups and finally settled on what you see.



Within the case I had an aluminum plate to work with. I mounted the body of the radio underneath along with an Anderson power pole block to distribute power. I also added a fan for cooling and a remote top facing speaker. Since the box is limited on space I had to mount the tuner in a way that the lid would close and I could make all the wiring connections. It also has some power plugs to power the Microsoft surface, cell phone and my HT if needed. Unfortunately I did not have room for a battery, it (Bioenno 20AH) is separate in an ammo can along with a solar charge controller with a wall charger that I use to power it all up. I also have a bag of antennas to go portable. I have my first 20 meter dipole I built, a random wire, and a Chameleon tactical delta loop to choose from. The next thing I want to add is a sound card for digital modes.

To say the least, I am hooked! I can't thank all the Elmer's from the club that have helped me and encouraged me. I am fascinated by all of it, and know I will never learn everything that those that came before me have. Thank you to all that have helped me!

-Greg Sherman KT1A



Photos this page by Greg KT1A

POTA / SOTA

Parks & Summits on the Air Activities

Dave W7UUU

SUNDAY JUNE 16th—Club Father's Day POTA event took place at Dash Point State Park, just a few miles North of Tacoma on the beautiful shores of Commencement Bay in the Puget Sound. Attended by four club members, all experienced POTA activators, the team consisted of BJ WA7WJR, John N7TES, Mike W7MKE, and Doug AB7DG. It was a beautiful, albeit a tad chilly, morning but the sun was out and many contacts were made. Photos contributed by Mike W7MKE

■ *-editor*

John N7TES operates his Elecraft KX3 into a Chameleon vertical antenna. He was set up at a lower location in the park, with the rest on up the hill behind

Doug Shafer AB7DG

BJ WA7WJR

All photos this page by Mike W7MKE

SEA-PAC 2024

Photo: W7UUU

SEA-PAC 2024 IS NOW IN THE HISTORY BOOKS

Held annually in Seaside, Oregon, SEA-PAC is the Pacific Northwest's largest amateur radio convention and is also the ARRL Northwestern Division Convention. Spanning three days every year on the first weekend in June, it's truly a major event. Featured are ARRL officers and presentations, along with many seminars given by hams from all over the country. And of course, one of the largest hamfests in the region as well.

This year, a number of W7DK members attended and these are a few photos submitted for publication.

-Dave W7UUU, editor

VP Adam W2NCC tending the W7DK booth presence at the Ham Fest in Seaside for SEA-PAC

"Enjoying the show" - from left: Paul W7PFU, President Mike W7XTZ, Phil K7PIA, and Steve AF7YD

ARRL The National Association for Amateur Radio

Bob Purdom AD7LJ ARRL WWA Section Manager ponders important League issues, with Northwestern Vice Director Michael Sterba KG7HQ behind him.

All photos this page by Mike W7XH

SEA-PAC 2024

Photo: W7UUU

W7DK HF manager, Phil K7PIA checks out the new and cool in the Icom booth

KENWOOD
Smith Chart Pop-up Demonstration
Compudigital Industries
www.k6iok.com (916) 205-2200
Show Special $279

Jeff Hilliard AK6PK (left) and Dan Platte N6TNI representing Kenwood for the event

Sunday afternoon, the crowd on pins and needles waiting for the drawing of the major prize!

Jeff Winget KK7PRJ (backpack) and Shay Winget checking out the goods

All photos this page by Mike W7XH

SEA-PAC 2024

Photo: W7UUU

Stan Nelson K7DKK Pierce County District Emergency Coordinator & Lorraine Nelson K7LJN

Bob AD7LJ (left), President Mike W7XTZ, and BOD member/HF manager Phil K7PIA

Arnold Klein WB6OEE was the MC and Keynote Speaker on opening night (Friday)

Sam N9MII and Becky KG7FZH visit with Bob AD7LJ (in blue)

All photos this page by Mike W7XH

RETURN TO HOME PAGE

Photo: W7UUU

View into the main floor of the Swap. Adam W2NCC (white shirt, right) visits with Mike W7XH

Main floor of the swap—nice crowd this year!

One of the long-held traditions of SEA-PAC is setting up to operate on the iconic sands of the Seaside, Oregon beach just a few blocks from the show

Unidentified staffer of SEA-PAC gathers a crowd from his station set up on the beach

All photos this page by Shay Winget

SEA-PAC 2024

Photo: W7UUU

Cool old gear abounds at most ham fests, if you're old enough to know what it is!

Member of the WA7BF club peruses the goodies

Large group of very focused and determined young folks take their first soldering lessons

Sometimes very high quality older test gear can be found for cheap. But lots of it, like this B&K TV Analyst from the analog TV days isn't likely to find a buyer these days.

All photos this page by Shay Winget

YOUTH ON THE AIR

Programs and stories for Youthful Hams

By Steve AF7YD

ARRL Student Membership
Full Student Membership (under age 26*) $30 per year
Free Student Membership (aged 21 years or younger*) FREE
Join Now
*Additional restrictions apply
/student

Steve Dightman, AF7YD at the ARRL Forum at SEA-PAC 2024 explaining the Northwest Ham Radio Youth Network

AT SEA-PAC IN JUNE, as I interfaced with attendees, as well as friends new and old, I related the story of the Camp Quest NorthWest event called Ham Radio Weekend that took place at the Radio Club of Tacoma clubhouse back in January (In the March Bark). At this event the club, via Camp Quest NorthWest, introduced a group of high school-aged kids to amateur radio. But over the course of these discussions at SEA-PAC, I came to realize that while many clubs might in fact be doing outreach to the youth of their community, the clubs as a whole don't seem to be aware of each others activities and outreach efforts.

I came to realize that "we" (meaning amateur radio clubs in general) really have a need for a means to connect and keep in touch regarding our collective youth outreach programs.

And while individual hams as well as clubs can have very diverse interests, ranging from fox hunting, working DX, contesting, satellites, certificate hunting, etc., we *all* share the desire to keep the hobby alive and well. And a key to achieving that success is to engage the youth in our community to at least make them *aware* of amateur radio in the sea of tech they are exposed to now.

To that end, I have created what I call the

NORTHWEST HAM RADIO YOUTH NETWORK

At SEA-PAC, I handed out over 100 4x6 information cards, requesting that hams intent on connecting with youth provide their contact information so that I can start building a network of like-minded clubs and individuals.

This is very much a work in progress, at first being spread simply by word of mouth at events like SEA-PAC. But once I start receiving contact information, I will follow up with an email blast with a spreadsheet so each group can become aware of their peers within the network as it grows.

Please—I invite you to join the network! Please send me an email with your: email address, phone number, zip code (just to know your region), and your club affiliations (if any).

(Continued on page 79)

Got a Youth radio story? Send it in!

YOUTH ON THE AIR

Programs and stories for Youthful Hams

IN OTHER YOUTH NEWS: I'm honored to say that I have recently been asked by the ARRL NW Division Section Manager for Western Washington to take on the role as **Section Youth Coordinator**. In this new role I am eager to help increase our collaboration among the many Northwest amateur radio Youth Network volunteers. Our longer term vision will focus on the many aspects of promoting youth learning, and participating in their real-world practical implementations.

Upcoming Event: Camp Quest NorthWest is holding the first of their two-week long residential camps in early July. We conducted an earlier test with their Leadership Track students, and learned a few things about setting up a fox hunt for students. At the upcoming camp there will be more of everything: campers, radios, and all the gear it takes. There will be a week-long operational theme (a secret for now) and successes of the campers finding the "hidden larva of an alien species" or other such crisis, will be a part of the camp mystique. Our hope is to generate some fun among the campers while introducing the opportunities for fun in the hobby of ham radio.

What are the youth activities *you* and *your* club are doing? Send me a couple pictures and a paragraph about the activity! Be sure to let us see faces and clearly show the activity at hand. I will include any submissions in future columns. Our collective YOUTH engagement is important for *all* of us!

Until next time—73 Steve AF7YD
ARRL WWA Section Youth Coordinator

TEACHING AMATEUR RADIO
at Summer Camp

From the ARRL

By Joel Colman, NO5FD

For over 30 years I have introduced Amateur Radio at residential camps where I've worked. Since 1999, I've worked at the Henry S. Jacobs Camp, located south of Jackson, Mississippi. This Jewish residential camp serves youth from all over the country, but draws most of its participants from Louisiana, Alabama, Tennessee, and Mississippi. For two weeks in the summer I serve as a clergy resource for the campers and staff, but my primary role has been working in the digital media program area. In my Amateur Radio introduction, I use a Kenwood TS-430S, a Heathkit HA-10 "Warrior" HF amplifier that was donated by a congregant, and a G5RV antenna stretched out in several high trees. Typically when the children come to camp, all the elective choices are presented to the campers by age group. Because the radio room can only accommodate about eight campers, I cannot take everyone who made Amateur Radio their number one choice.

Joel Colman, NO5FD and campers in the radio room at Henry S. Jacobs Camp.

(Continued from page 79)

Diving Right In

When I welcome a group to the Amateur Radio station, I explain the basics of the hobby and then go over the phonetic alphabet so the campers can understand the language being heard on the radio. I explain the concept of calling CQ, why we must look for an open frequency first, and that we may not always get a response when we call CQ. I will have a script ready for the campers to use when they call CQ. This way, if I want them to call a new sequence of CQ, I can simply point to that part of the script. I like using a microphone with an off/on switch, as some children cannot squeeze the PTT button fully. Once a CQ is answered, I have another script ready to go, where I write down the call sign, signal report, and the name of the contact. I also encourage the campers to tell the contact what city they are from, their age, what they like about camp, what their favorite food at camp is, etc. I also like having QRZ.com loaded on my laptop, so we can look up the call sign of the contact, and then we can look up in the atlas where the operator is located.

Putting a Perspective on Theory

During my time with the campers, one of my objectives is to explain the radio spectrum. I start with the AM band, since the campers usually understand that part of the spectrum. I highlight why frequencies in the AM band react differently at night, which gives me an opportunity to explain DX communications later. I then take them higher up the frequency chart, discussing certain slivers of band, such as where aero communications take place, Amateur Radio band frequencies, military communications, and shortwave. I also like to point out NOAA weather frequencies in the 150 MHz band, FRS/GMRS radios, police & fire, cellphone frequencies, and even the frequencies that some fast food restaurants use for the drive up windows. I highlight the location of FM radio, which campers still listen to, so I can put a familiar radio frequency in a framework. Then when we dial around the 20 meter band looking for a QSO, the campers have a stronger concept of why we are on that frequency.

Speaking Their Language

One aspect of Amateur Radio that the campers find really fun is contesting. The IARU HF contest sometimes takes place the weekend we're at camp, and I have put the logging software specific to that contest to good use in teaching. Once I taught the campers the correct exchange, I had one camper doing the logging and the others making the QSOs. The campers discovered that after logging in a call sign, the software would indicate how many points the QSO was worth. Contesting is fun, points are tallied, and eventually you can see how your score compares to others around the world. This is something that our youth can relate too. For the campers, this is not a contest — it's "gaming on the air!"

More to Come

There are other activities that take place in the Amateur Radio program, such as playing a game of hide-and-seek using FRS radios and introducing Morse code. I'll detail them in a future article.

By—Joel Colman, NO5FD

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EMERGENCY COMMUNICATIONS

Amateur Radio EmComm News & Topics

IN TIMES OF CRISIS, reliable communication is crucial to ensure the safety and well-being of communities. Amateur radio has proven to be an invaluable resource during emergencies, filling communication gaps when conventional systems fail or become overwhelmed.

In this article, I will explore the importance of amateur radio in emergency situations, its capabilities, and the organizations that support its use in critical situations.

Amateur radio operators are trained to provide voice and data communication during emergencies, allowing direct communication with non-amateur entities such as emergency services, hospitals, and public works departments.

Ham radio operators can establish ad-hoc networks using traditional voice communication and various digital modes to send emails and data files, making it a reliable alternative when cellphone towers go down or in areas with limited coverage.

Amateur radio operators often have extensive communications experience or professional broadcasting experience, and many are first-responders, are FEMA-trained, or have law enforcement backgrounds.

They can provide real-time severe weather reports, aid in search and rescue missions, coordinate efforts during disasters, and support international aid groups in the aftermath of calamities.

Various organizations in the US and around the world exist to support public service and emergency communications, providing coordination and resources for operators involved in critical situations.

These organizations include Amateur Radio Emergency Service (ARES), American Red Cross (ARC), Community Emergency Response Teams (CERT), Radio Amateur Civil Emergency Service (RACES), Radio Emergency Associated Citizens Teams (REACT), Salvation Army Team Emergency Radio Network (SATERN), and SKYWARN.

These organizations work closely with local authorities, disaster response agencies, and volunteer groups to ensure effective communication during emergencies.

Emergency management coordinators can integrate ham radio into contingency plans in several ways, such as establishing an auxiliary

Got an EmComm story to tell? Send it in!

EMERGENCY COMMUNICATIONS

Amateur Radio EmComm News & Topics

emergency communications unit consisting of ham operators, hosting ham radio licensing classes, and scheduling drills and exercises to keep operators ready to respond in emergencies.

Ham radio operators can assist with direct communication, voice and data communication, and provide essential two-way radio communications for prompt and efficient assignments and coordination of transportation resources.

Amateur radio plays a vital role in emergency communications, filling communication gaps when conventional systems fail or become overwhelmed. Its capabilities, training, and the dedication of its operators make it an invaluable resource during emergencies.

By integrating amateur radio into emergency management plans, communities can ensure reliable communication and a higher level of preparedness during times of crisis.

Thanks for reading

Dr. Samir Khayat OD5SK, HZ1SK, JY8KS and KC5RYL

IN HISTORY

NOTABLE EARLY EVENTS of AMATEUR RADIO

disaster communications in history

1906 -- According to family lore, radio amateur Barney Osborne, later W6US, provided emergency traffic handling during the San Francisco Earthquake and fire.

1913 -- Hams provided emergency communications during Midwest storms and floods with spark-gap transmitters and crystal receiver sets, as vacuum tubes wouldn't emerge until after World War I.

1916 -- A national traffic relay system was organized to provide relay of messages cross-country, and 9XE in Illinois originated a message that was received in California in 55 minutes, and on the East Coast an hour after that.

1925 -- Amateur radio provided the only communications (5 watts CW) during the failed rescue attempt of caver Floyd Collins.

1926 -- The cover of the May issue of *QST* featured a drawing of a railroad engineer holding an ARRL Radiogram with the caption reading, "Amateurs Give Emergency Service for Railroads When Wires Are Down". ■ *-editor*

STRAY TOPICS OF INTEREST

Fun stuff for Hams to read!

W7UUU

REGISTRATION IS NOW OPEN for the Pacific Northwest DX Convention sponsored by SteppIR and the Western Washington DX Club. The conference will be held Friday through Sunday, August 9-11, 2024 at the Delta Hotel in Everett, WA . Registration for the entire convention, including all talks, Saturday Dinner Banquet, Sunday Breakfast Banquet, and access to the Hospitality Suite Friday and Saturday evenings is $175 before July 1, and increases to $195 through August 1. Registration at the door is $225, so register early for the best value!

PACIFIC NW DX CONVENTION

AUG. 9TH–11TH, 2024

EVERETT WASHINGTON

CLICK HERE

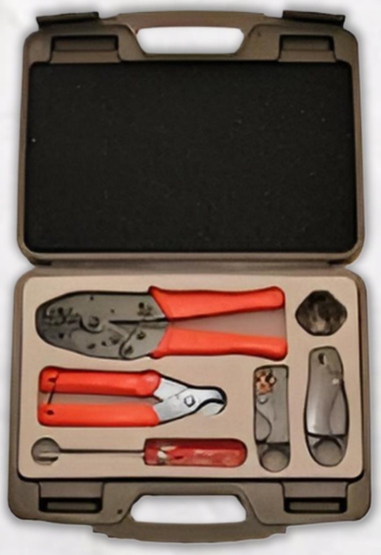
Hosted by the

WESTERN WASHINGTON DX CLUB

PACIFICNWDXCONVENTION.COM

SOONER OR LATER, every ham will reach the point where it becomes cost prohibitive, inconvenient, or both: using pre-made commercial coax cables just doesn't cut it anymore.

You have to start making your own cables. It's not all that hard, and modern tools abound for making it pretty fast and easy using crimp-on connectors (with soldered center conductors).

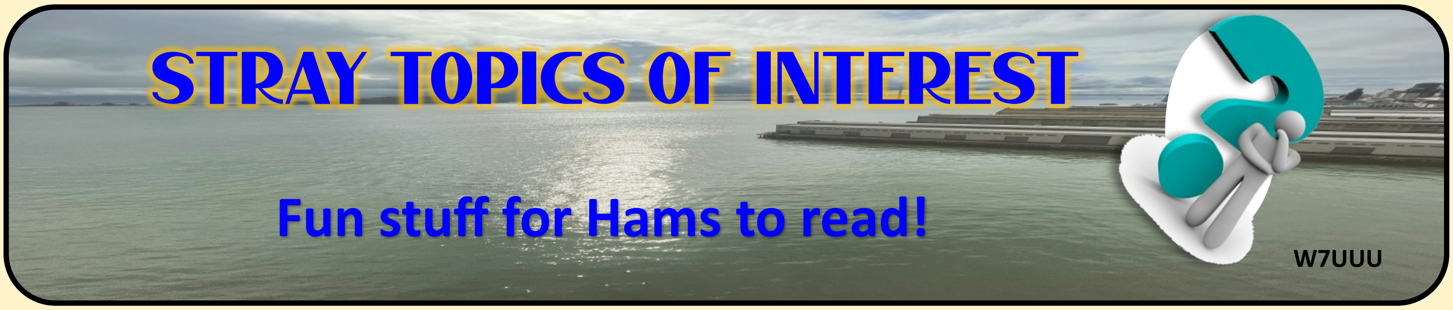


Click image to view at HRO

Some hams adhere to the "solder only" camp when it comes to installing PL-259 connectors on coax for ham use. But modern high-quality crimp connectors are long-proven to work and work well. Crimped connections, done correctly, can even be superior to soldered connections.

There are many kits for prepping and crimping on PL-259 and similar connectors, covering a vast range of prices. But I've had tremendous success with this $90 kit from HRO, using high-quality DX Engineering or Amphenol connectors. I've made a great many cables up with this system, with a 100% success rate. It really is a "cool tool" in my shack. ■ *-editor*

The key to success: good quality connectors. They don't come cheap. Avoid no-name inexpensive connectors. Only use DXE or Amphenol. Click image to view



STRAY TOPICS OF INTEREST

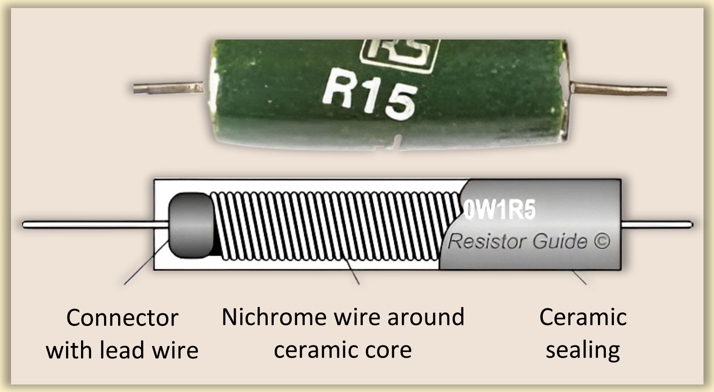
Fun stuff for Hams to read!

Hidden Word Contest!

Somewhere in this edition of the Logger's Bark is a hidden word. If you are the first to find that word and report it to your Editor, you will win a free QRZ Sticker mailed to you! **This month's word is Nichrome.** It will be hiding in a sentence—just tell your editor via email what the word is and the page and you will win if you are the first! (***THIS page*** doesn't count!)

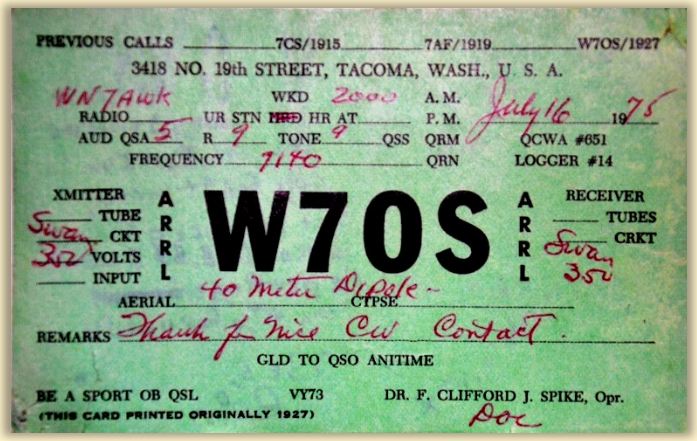
Nichrome (Nickel Chromium) wire is one of the most common wire types used in wire-wound resistors. Such resistors are known for their properties of extreme accuracy and low resistance values, often with very high power ratings. This makes them suitable for use in power supplies. Virtually every ham radio transmitter or receiver, up to the present day, will have at least a few wire-wound resistors, usually in the power supply.

Wire-wound resistors were one of the first types of resistor to be manufactured—first for general electrical products then wireless systems and radios. In many cases, they have been superseded by other types such as metal oxide and metal film resistors. However, even today, they are the resistor of choice for many applications. ■ *-editor*

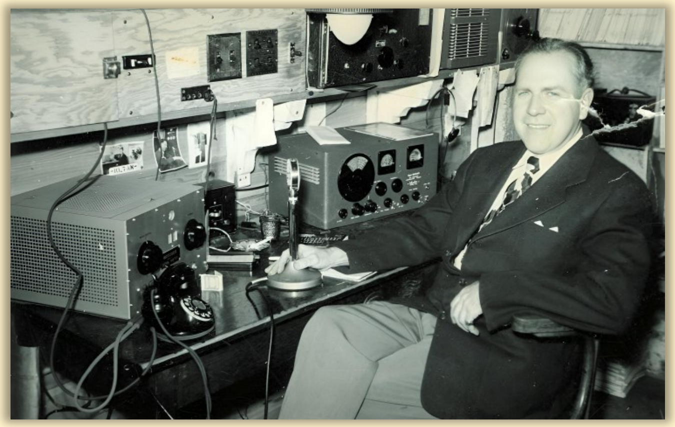


Top image: *electronicsnotes.com*
Bottom image: *EEpower.com*

QSL Card of the Month


PREVIOUS CALLS 7CS/1915 7AF/1919 W7OS/1927
3418 NO. 19th STREET, TACOMA, WASH., U. S. A.
WN7AWK
RADIO WKD 2000 UR STN ~~HRD~~ HR AT A. M. P. M. July 16 1975
AUD QSA 5 R 9 TONE 9 QSS QRM QRN QCWA #651
FREQUENCY 7140 LOGGER #14
XMITTER Swan TUBE CKT 350 VOLTS INPUT
ARRL
W7OS
ARRL
RECEIVER TUBES Swan 350 CRKT
AERIAL 40 Meter Dipole - CTPSE
REMARKS Thanks for Nice CW Contact.
GLD TO QSO ANITIME
BE A SPORT OB QSL VY73 DR. F. CLIFFORD J. SPIKE, Opr.
(THIS CARD PRINTED ORIGINALLY 1927) Doc

One of my favorite QSL cards is this one from Dr. Clifford J. Spike, W7OS, or "Doc Spike" as everyone in the club called him. I was a 6-week-new Novice WN7AWK when I had my 40m CW contact with Doc, and he brought the QSL card to my house personally. He was the club "member photographer" then and took my photo for the club photo archives. Once done, he joined my family for fried chicken and mashed potatoes dinner. He was one of the nicest hams I have ever known, and one of the founding members of the Radio Club of Tacoma. Please send in *your* favorite or special QSL cards to be seen here! ■ *-editor*



Undated photo of Doc Spike W7OS in his shack—most likely in the mid-late 1940s. *Photo: W7DK Archives*

W7DK LIVING HISTORIES

Member video interviews and profiles

W7UUU

BACK IN 2015, when I was helping to organize the W7DK Centennial Banquet and Celebration, I asked about possibly recording video interviews of club members for future generations to learn more about those that came before them. However, that plan like so many things in life, sort of slipped by the wayside and I truly regret not revisiting such a project much sooner.

The fairly recent loss of our most senior member, Worth Gurley, W7WG, a true friend to all who knew him and to strangers alike, reminded me of the extreme importance of capturing aspects of our members lives and involvements not in only ham radio, but also with the Radio Club of Tacoma.
So I've finally got that "round TUIT" that I should have found sooner and have embarked on recording what I am calling the W7DK Living Histories Project. For this effort I video a short (15-20 minute) interview with our members in a free-form format to allow them to share some insights into how they came to amateur radio, and how they became involved with the Radio Club of Tacoma.

So far I have produced a small number of these videos but it's an ongoing process, and I hope to continue until all members who wish to participate have had a chance to do so.

One of the challenges of any such project is where to store the data that is the encoding result of all the video that is produced and edited. If stored on a local computer such as at home it is subject to the failures we all know can happen: fire, electronic failure, physical loss (where did I put that hard drive?) or other calamities. Storing at the clubhouse doesn't fare any better in the long run.

So the videos are being uploaded to YouTube, where they have a strong chance of remaining there for a great many years to come. Several are already uploaded, with several more in editing and more on top of that slated to shoot.

I hope to record such histories of ALL members who wish to tell their stores—please contact me if you would like to participate.

Please enjoy this series of videos, with a new link every month. Click the image to watch the video.

-Dave W7UUU

W7DK Living Histories Project #7

Click picture to watch the video

Ham Shack of the Month

This needs to feature *YOUR* shack!

OK Folks… we're now *SEVEN MONTHS* into the current version of The Logger's Bark! But I have not yet received *one single submission* for "Shack of the Month". Sure, I could just pull something off the web… but we have *over 300 members,* most of whom have *some sort* of Ham Shack they could share with the club! So now it's your turn—please send a *clear detailed photo* of your shack, with a description of what's going on in the photo. It needn't be long—just enough to fit this space (100 words is ALL!). Email address is below!!

TNT THE NEW HOT THING

Hot and new products to think about

W7UUU

CHINESE RADIO MANUFACTURER Xiegu recently announced their latest "New Hot Thing" - the X6200 HF and 50 MHz all-mode ultra-portable SDR transceiver. As with the earlier transceivers in the Xiegu lineup, this new rig is QRP, sporting 8 watts with an external power source or 5 watts on the internal battery (contrast with the Icom IC-705 which is 10 and 5, respectively).

The 4" screen is full color, 800x480 pixels resolution. There's a built-in automatic antenna tuner, SWR scanner, voice memory keyer, and CW memory keyer. And of course it also offers a USB connection with built-in sound card for digital modes. But unlike most other offerings on the market, it features wireless FT8 operation which could be very appealing for POTA applications. Very intriguing feature!

The manufacturer claims a battery life from the built-in 3200mAh battery of 4 to 5 hours—plenty for just about any POTA or SOTA activation. What's more, the battery is removable so users can pack extras along for weekend POTA outings if they need to.

In addition to the expected 160 through 6 amateur band transmit and receive coverage, there is also .5 to 30 MHz and 50 to 54 MHz continuous receiver coverage. And on top of that, you can also listen to the standard FM broadcast band as well as the AM Air Band covering 108 to 136 MHz.

There are many more details and features of this feature-packed little rig at the Radiooddity site, who are the US distributors for Xiegu products. Please click the link to dive deeper if you want to know more.

So far, reports from the field are good! From QRPer.com, "The X6200 definitely held its own during this [POTA] activation". In other reviews, I've noted that the speaker level is a bit lacking but surely that's a factor of its tiny size. Most serious POTA users tend to wear headphones (I do even though my IC-705 has a pretty amazing internal speaker and works very well).

Since the beginning, Xiegu transceivers have been known for having really solid internal antenna tuners with very wide matching range—and I've not seen any negative reports so far regarding any performance flaws or issues. But more information is coming online all the time on this new little rig.

At a price point of $799 it comes in well below the typical $1349 of the IC-705 but really seems to offer a lot of functionality the Icom lacks.

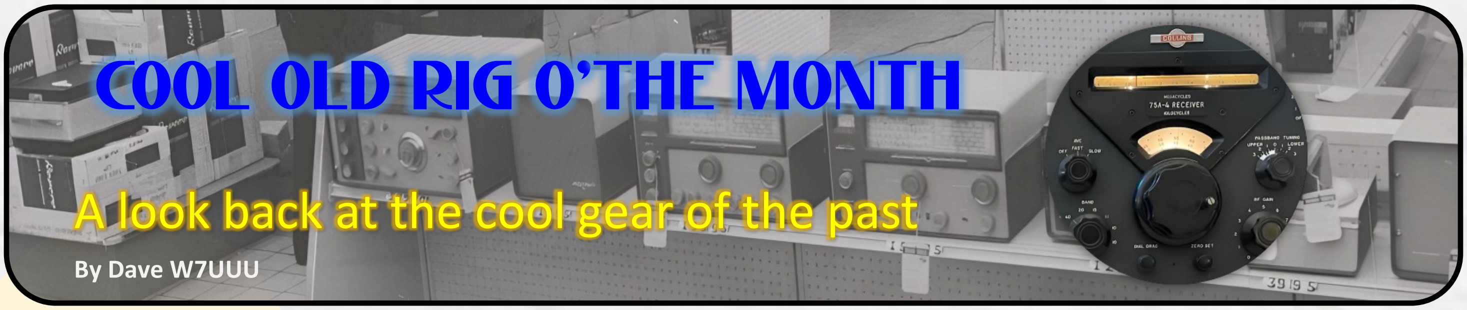
-Dave W7UUU

Click to visit the Manufacturer's Site

COOL OLD RIG O'THE MONTH

A look back at the cool gear of the past

By Dave W7UUU



THIS MONTH'S COOL OLD RIG isn't really a rig exactly but is still one of the iconic ham radio products from the past. It's the Heathkit SA-5010 µMatic™ (pronounced "Micro-Matic") Memory Keyer for CW operators, billed at its introduction as, "Best buy of its type in ham radio" introduced in 1981.

The SA-5010, designed by "one of the Hams at Heath", Terry Perdue K8TP, was a microprocessor-based replacement for the earlier, and much beloved, HD-1410 keyer (also designed by K8TP). But the 1410 was still so popular that both keyers were sold for a period of some three years overlapping until the 1410 was finally discontinued.

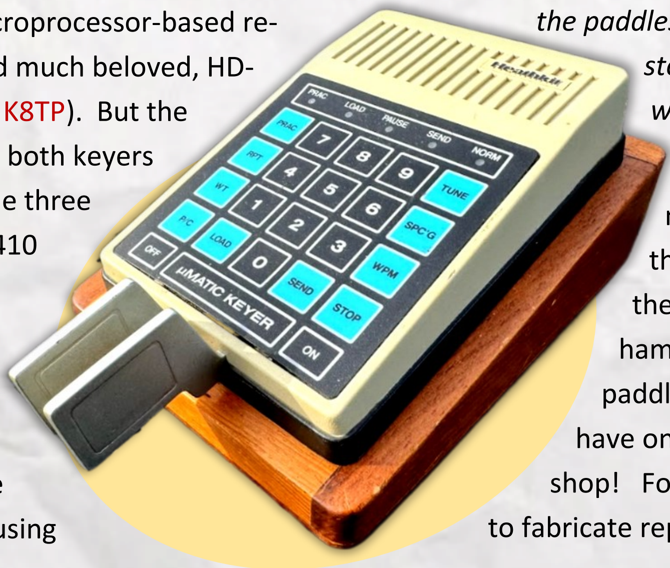
The SA-5010 is very unique among "paddle keyers" of the time in that the paddles don't move! Rather, they are touch sensitive metal plates using CMOS circuits to convert finger touches into signals to operate the device.

I recently caught up with Terry K8TP, the engineer behind the 5010, and asked him the backstory on the design and how it came about.

Terry: *"I got the basic idea for touch paddles from Don Lancaster's CMOS Cookbook, which contained the schematic for a touch switch (see **Figure 2**). I thought it would be a novel way to eliminate the mechanical part of a keyer.*

*My initial idea was to make the paddles a permanent part of the case, but someone [at Heath Co. –ed.] decided they should plug in. **Figure 1** is the Model Shop's mock-up of what I thought it should look like, with a solid wood model!"*

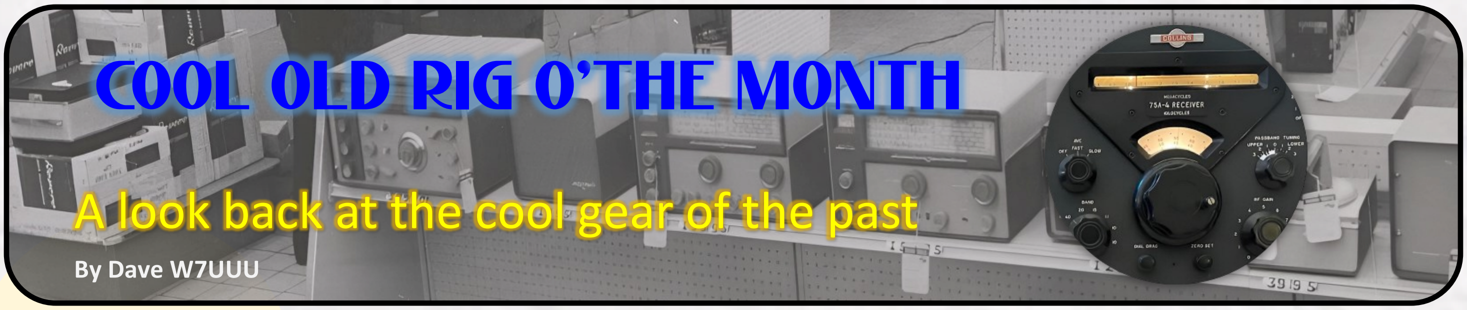
However, the final product ended up with the paddles being removable with a slot in the rear bottom of the case to store them. ***Terry:*** *"I think the mechanical engineer could have done a better job with the loose way the paddles plug in, but it was his idea to store them in the back, and that was really clever".*



I recently spotted this beautiful example of the SA-5010 keyer (complete with original power supply) at a hamfest for a mere $20. Not only did it turn out to work perfectly, it even came with this beautiful custom wooden base that the keyer nestles into in the perfect operation position

Of course, over the years many SA-5010 keyers lost their paddles so it's not unusual these days to spot the 5010 at a hamfest only to find the metal paddles are not there. In fact, I have one just like that in my own shop! Fortunately it's not too difficult to fabricate replacement paddles out of scrap aluminum in your shop with simple skills. But of course, there's also a 3-pin header on the rear apron that allows for an external paddle so even if the built-in paddles are long lost, the keyer can still be used as intended otherwise.

As mentioned, the SA-5010 is microprocessor controlled and offers just about every possible feature you could want in a keyer! Speed ranges from 1 to 99 WPM and has a memory of 240 characters in up to 10 memory banks. The memories are what is called "soft-sectored" so only the characters actually used con-



COOL OLD RIG O'THE MONTH

A look back at the cool gear of the past

By Dave W7UUU

sume memory without wasting storage. The memories also support "command strings" that can be used to insert a pause for sending data like an RST, or to tell the keyer to change its speed mid-message (i.e., sending the 599 super fast in a contest exchange but sending the rest at a slower speed). The user may also chain two or more memories together to send compound messages. This could conceivably allow an operator to almost fully automate a contest exchange by simply triggering memory messages in sequence.

Another popular feature of the SA-5010 is the built-in Morse practice sessions. Users can program it to just send letters, or letters and numbers, or letters, numbers and punctuation. Over 6000 practice sequences are built into memory, so the odds of memorization through repetition are virtually zero.

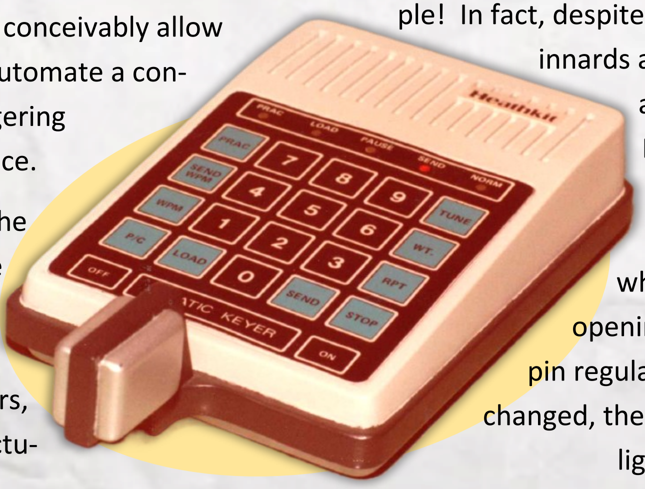


Figure 1—***Terry***: *"This is the Model Shop's mockup of what I thought it should look like. That's a solid block of wood!" Photo provid-*

Of course, the era of the SA-5010 was not yet the time of a PC in everyone's home office! So all of the programming functions are controlled via the membrane keypad on the top of the unit.

It was unheard of in 1981 to see a "computer controlled" ham radio keyer like this and it was truly cutting edge for its time.

Terry: *"This was my first product containing a microprocessor (Mostek 3870). An engineer named Rod Brahman was very helpful in getting me up to speed with it. He had designed the OC-1401 Nav Computer which used three 3870s doing parallel processing—something even Mostek had no idea could be done*".

In many ways, the SA-5010 set the standard for the function and workflow of all programmable keyers that followed, right up to the modern era.

Internally, I would not consider the SA-5010 to be simple! In fact, despite not using SMD components, the innards are just as compact and tightly fit as any product from QRP Labs or Elecraft today. Just changing out the 3 Eveready A76 button cells that hold the memory is a somewhat delicate operation, involving opening the case, which unseats a 3-pin regulator chip. Once the batteries are changed, the case must very carefully be realigned with the regulator pins on the top half with the socket on the bottom half. It would be very easy to cause damage if this isn't done carefully. There are other pitfalls: early units were prone to static damage, but even the later gray-case A versions, while better, were still prone to damage. Also, since the paddles use stray capacitance between your body and the paddles, operation can sometimes be erratic. There are adjustments to help set the sensitivity for optimal use.

But overall, the SA-5010 was truly a landmark innovation for CW operators worldwide and a great many were sold over the 10 year run of this product. Special thanks to Terry K8TP for contributing to this article. *Photos and detailed captions follow* -Dave W7UUU

COOL OLD RIG O'THE MONTH

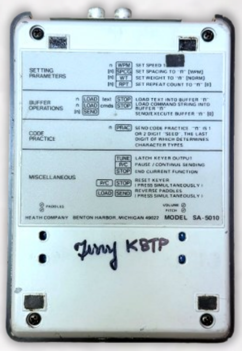
A look back at the cool gear of the past

By Dave W7UUU

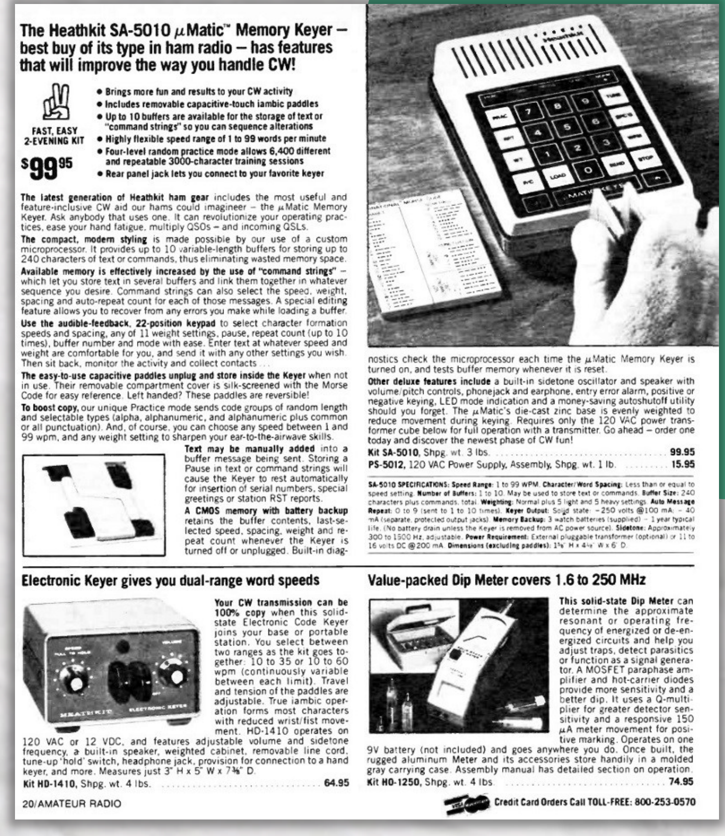
SA-5010 NOTES

Terry Perdue, K8TP
In his super-neat shop & desk (with another smart fella looking over his shoulder). Terry was responsible for many designs at Heath and later at AEA that was in Bellevue, Washington

Photo by Dave W7UUU



Terry's own "Engineer's build" of the SA-5010 that I purchased into my own collection and asked him to autograph



The Heathkit SA-5010 μMatic™ Memory Keyer – best buy of its type in ham radio – has features that will improve the way you handle CW!

- Brings more fun and results to your CW activity
- Includes removable capacitive-touch iambic paddles
- Up to 10 buffers are available for the storage of text or "command strings" so you can sequence alterations
- Highly flexible speed range of 1 to 99 words per minute
- Four-level random practice mode allows 6,400 different and repeatable 3000-character training sessions
- Rear panel jack lets you connect to your favorite keyer

FAST, EASY
2-EVENING KIT

$99.95

The latest generation of Heathkit ham gear includes the most useful and feature-inclusive CW aid our hams could imagineer – the μMatic Memory Keyer. Ask anybody that uses one. It can revolutionize your operating practices, ease your hand fatigue, multiply QSOs – and incoming QSLs.

The compact, modern styling is made possible by our use of a custom microprocessor. It provides up to 10 variable-length buffers for storing up to 240 characters of text or commands, thus eliminating wasted memory space.

Available memory is effectively increased by the use of "command strings" – which let you store text in several buffers and link them together in whatever sequence you desire. Command strings can also select the speed, weight, spacing and auto-repeat count for each of those messages. A special editing feature allows you to recover from any errors you make while loading a buffer.

Use the audible-feedback, 22-position keypad to select character formation speeds and spacing, any of 11 weight settings, pause, repeat count (up to 10 times), buffer number and mode with ease. Enter text at whatever speed and weight are comfortable for you, and send it with any other settings you wish. Then sit back, monitor the activity and collect contacts . . .

The easy-to-use capacitive paddles unplug and store inside the Keyer when not in use. Their removable compartment cover is silk-screened with the Morse Code for easy reference. Left handed? These paddles are reversible!

To boost copy, our unique Practice mode sends code groups of random length and selectable types (alpha, alphanumeric, and alphanumeric plus common or all punctuation). And, of course, you can choose any speed between 1 and 99 wpm, and any weight setting to sharpen your ear-to-the-airwave skills.

Text may be manually added into a buffer message being sent. Storing a Pause in text or command strings will cause the Keyer to rest automatically for insertion of serial numbers, special greetings or station RST reports.

A CMOS memory with battery backup retains the buffer contents, last-selected speed, spacing, weight and repeat count whenever the Keyer is turned off or unplugged. Built-in diagnostics check the microprocessor each time the μMatic Memory Keyer is turned on, and tests buffer memory whenever it is reset.

Other deluxe features include a built-in sidetone oscillator and speaker with volume/pitch controls, phonejack and earphone, entry error alarm, positive or negative keying, LED mode indication and a money-saving autoshutoff utility should you forget. The μMatic's die-cast zinc base is evenly weighted to reduce movement during keying. Requires only the 120 VAC power transformer cube below for full operation with a transmitter. Go ahead – order one today and discover the newest phase of CW fun!

Kit SA-5010, Shpg. wt. 3 lbs. **99.95**
PS-5012, 120 VAC Power Supply, Assembly, Shpg. wt. 1 lb. **15.95**

SA-5010 SPECIFICATIONS: Speed Range: 1 to 99 WPM. **Character/Word Spacing:** Less than or equal to speed setting. **Number of Buffers:** 1 to 10. May be used to store text or commands. **Buffer Size:** 240 characters plus commands, total. **Weighting:** Normal plus 5 light and 5 heavy settings. **Auto Message Repeat:** 0 to 9 (sent to 1 to 10 times). **Keyer Output:** Solid state: −250 volts @100 mA; −40 mA (separate, protected output jacks). **Memory Backup:** 3 watch batteries (supplied) – 1 year typical life. (No battery drain unless the Keyer is removed from AC power source). **Sidetone:** Approximately 300 to 1500 Hz, adjustable. **Power Requirement:** External pluggable transformer (optional) or 11 to 16 volts DC @200 mA. **Dimensions (excluding paddles):** 1⅝" H x 4½" W x 6" D.

Electronic Keyer gives you dual-range word speeds

Your CW transmission can be 100% copy when this solid-state Electronic Code Keyer joins your base or portable station. You select between two ranges as the kit goes together: 10 to 35 or 10 to 60 wpm (continuously variable between each limit). Travel and tension of the paddles are adjustable. True iambic operation forms most characters with reduced wrist/fist movement. HD-1410 operates on 120 VAC or 12 VDC, and features adjustable volume and sidetone frequency, a built-in speaker, weighted cabinet, removable line cord, tune-up 'hold' switch, headphone jack, provision for connection to a hand keyer, and more. Measures just 3" H x 5" W x 7⅜" D.

Kit HD-1410, Shpg. wt. 4 lbs. **64.95**

Value-packed Dip Meter covers 1.6 to 250 MHz

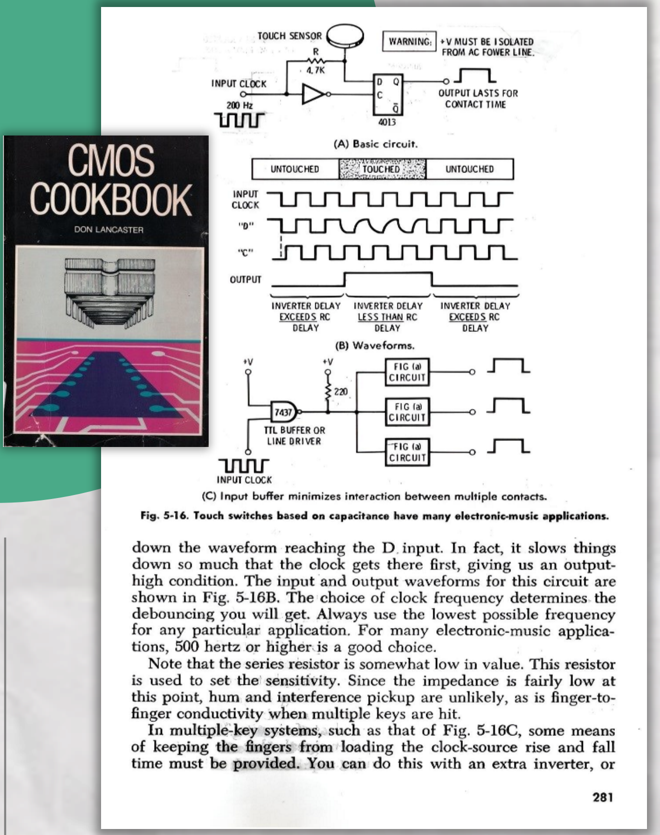
This solid-state Dip Meter can determine the approximate resonant or operating frequency of energized or de-energized circuits and help you adjust traps, detect parasitics or function as a signal generator. A MOSFET paraphase amplifier and hot-carrier diodes provide more sensitivity and a better dip. It uses a Q-multiplier for greater detector sensitivity and a responsive 150 μA meter movement for positive marking. Operates on one 9V battery (not included) and goes anywhere you do. Once built, the rugged aluminum Meter and its accessories store handily in a molded gray carrying case. Assembly manual has detailed section on operation.

Kit HO-1250, Shpg. wt. 4 lbs. **74.95**

20/AMATEUR RADIO

Credit Card Orders Call TOLL-FREE: 800-253-0570

[Heathkit Christmas catalog](#) ad for the SA-5010, from 1982 (p.20). The keyer originally sold for $99.95, with an additional $15.95 for a matching power supply. Note also that the HD-1410 keyer (lower left) was listed for $30 less. Both were designed by Terry Perdue K8TP, "One of the Hams at Heath"


CMOS COOKBOOK
DON LANCASTER
TOUCH SENSOR
R
4.7K
INPUT CLOCK
200 Hz
D
C
Q
Q̄
4013
WARNING: +V MUST BE ISOLATED FROM AC FOWER LINE.
OUTPUT LASTS FOR CONTACT TIME
UNTOUCHED
TOUCHED
UNTOUCHED
INPUT CLOCK
"D"
"C"
OUTPUT
INVERTER DELAY EXCEEDS RC DELAY
INVERTER DELAY LESS THAN RC DELAY
INVERTER DELAY EXCEEDS RC DELAY
+V
+V
220
7437
TTL BUFFER OR LINE DRIVER
FIG (a) CIRCUIT
FIG (a) CIRCUIT
FIG (a) CIRCUIT
INPUT CLOCK

(A) Basic circuit.

(B) Waveforms.

(C) Input buffer minimizes interaction between multiple contacts.

Fig. 5-16. Touch switches based on capacitance have many electronic-music applications.

down the waveform reaching the D input. In fact, it slows things down so much that the clock gets there first, giving us an output-high condition. The input and output waveforms for this circuit are shown in Fig. 5-16B. The choice of clock frequency determines the debouncing you will get. Always use the lowest possible frequency for any particular application. For many electronic-music applications, 500 hertz or higher is a good choice.

Note that the series resistor is somewhat low in value. This resistor is used to set the sensitivity. Since the impedance is fairly low at this point, hum and interference pickup are unlikely, as is finger-to-finger conductivity when multiple keys are hit.

In multiple-key systems, such as that of Fig. 5-16C, some means of keeping the fingers from loading the clock-source rise and fall time must be provided. You can do this with an extra inverter, or

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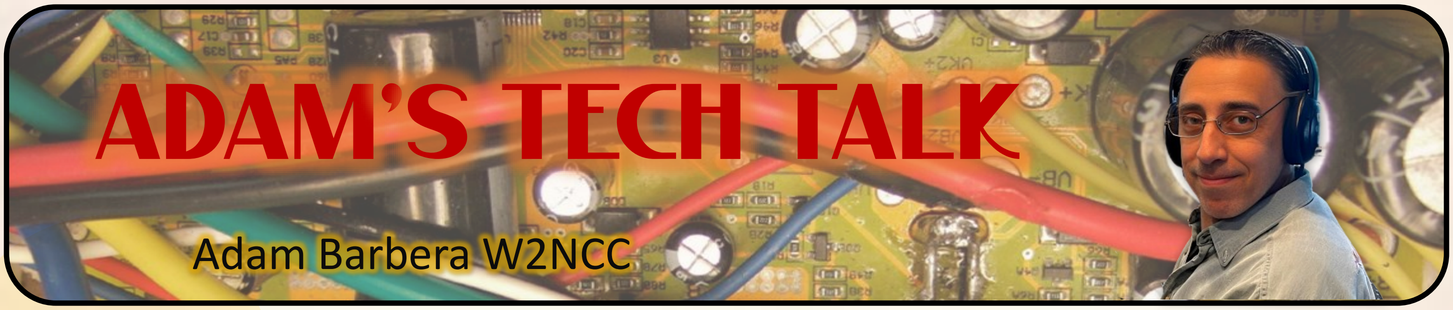
Figure 2—*[CMOS Cookbook by Don Lancaster](#) (and the matching TTL Cookbook) was considered the Bible of CMOS chips in the early 1980s and well beyond for those designing digitally. The simple schematic and description above from the book was the initial inspiration for what would become the SA-5010 keyer*



ADAM'S TECH TALK

Adam Barbera W2NCC

SAFETY PRACTICES When Working on Classic Rigs

Via a recent very generous donation to the club, we have come into the possession of a large number of vintage ham transmitters, receivers, and other gear. The donation includes EF Johnson, Hallicrafters, Hammarlund, Heathkit, and many other legendary brands and iconic rigs. These names may not ring a bell for some modern hams, but in the 1950s, 60s, and 70s these brands were considered the crown jewels of any well-equipped ham station of that time.

But the next step, breathing new life into the aging classics, requires a strong commitment to safety protocols—not just for the equipment but certainly for the people doing the repairs and restorations.

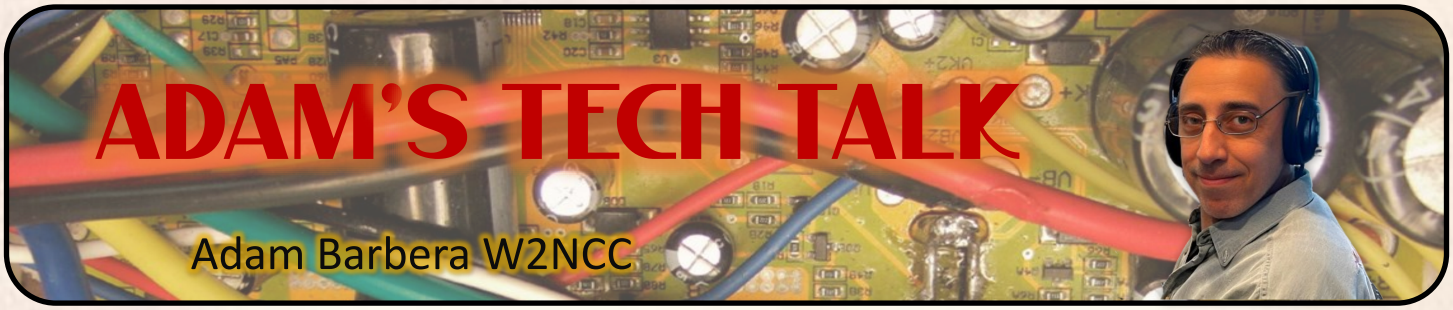
Time has in many cases not been kind to their inner workings: capacitors dry out and fail, carbon composition resistors after decades of absorbing the atmosphere drift wildly in their value (usually up), and insulation that once protected wires and components carrying high voltages may now have crumbled away, exposing bare wire.

On top of all of these concerns is the fact that the working and maintenance histories of these pieces is a mystery-countless previous owners who possibly introduced modifications or makeshift-engineered repairs that could compromise their integrity.

The first inclination of an inexperienced operator coming into possession of old rigs like these is to "plug it and see if it works!". In some cases, that's the worst possible thing to do, and the failure of ancient parts could cause a cascading effect of new failures and ultimately ruin key parts such as power transformers. Items like this cannot just be ordered as replacements, so utmost respect is required when beginning any service on old radios like these.

The process of awakening them should be well thought out and considered before the power plug ever touches an outlet. Here's just a few general guidelines:

1. **INSPECTION:** A thorough physical inspection is a must. Check for broken parts, and missing parts such as tubes; remove the radio from the cabinet and inspect the entire chassis for anything that looks amiss: oddball wires that look added, parts dangling that could be an old modification, rodent droppings and nesting debris, etc.
2. **TUBES:** carefully remove each tube and gently dust. WARNING: do not ever scrub a tube or use solvent to clean the glass! The tube type is stamped on the glass with a dye that can easily be washed off! An old trick to ID a tube type is to "hot breathe" close to the glass where the number is printed. That helps bring it out so you can more easily read it. I prefer to test all the tubes at this stage—a tube with an internal short could cause damage if plugged in. Most any tester that can test for shorts, and verify the filament is good is perfect a this juncture. We're just making sure the tube won't cause damage if powered.
3. **CURRENT LIMITING DEVICE:** Before powering up any old (or new, for that matter!) radio, be sure you're using a current limiting device. A simple incandescent light bulb (100w or 150w) in parallel with the AC feed to the radio will suffice. Google "Dim Bulb Tester" to find simple plans to build one.



ADAM'S TECH TALK

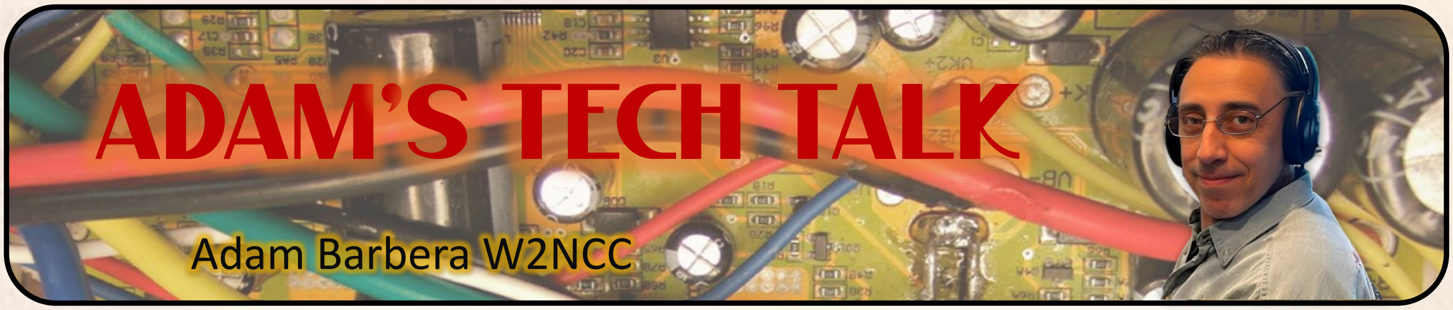
Adam Barbera W2NCC

(The Bark will be featuring a simple build of such a device in an upcoming issue).

4. **VARIAC™** Variable Auto-transformer: When it comes time to try an initial powering of the radio, many techs like to use a variable auto-transformer to bring power up slowly. If any components are near to failure, they likely will fail at a lower voltage and hopefully not cause significant damage before being quickly powered off. Variac™ is a common brand of such a device—but there are many available, and not all are the same. A mistake many make however is to only turn up the auto-transformer to the point the tubes light then leave it. However, if the radio uses a tube rectifier, and the auto-transformer isn't turned up sufficiently for it to conduct, no high voltage will be delivered to the rest of the radio! That makes it pointless to do. Always use a VTVM or VOM to make sure the auto-transformer is turned up just enough for the rectifier to do its job and start delivering high voltage DC to the radio.

5. **ISOLATION TRANSFORMER:** Some auto-transformers are fully isolated, meaning there is a 120v primary input, and a 0 to 140 volt secondary output, and they are not connected. If you purchase an autotransformer and it does not explicitly say it's isolated, you need to check that. The Hot and Neutral connection from the primary should not have continuity to the secondary. Most modern auto-transformers, to meet UL, will have the ground connected from input to output—so even though the Hot and Neutral do not pass through, ground does—and that can be a dangerous problem with some radios. Older Variac™ transformers lacking a ground pin are truly isolated. No connection on the primary makes it to the secondary. But if you're working on an AC/DC transformerless radio like a Hallicrafters S-38, for safety you should be fully isolated when doing service work, since there is a possibility in such a radio for the chassis to be "hot". Should any part of your body touch a ground and the chassis in that instance, you can receive a full 120 volt AC shock. So to work with a modern auto-transformer where there is a ground pin, you should use an "AC ground cheater" adapter - USE AT YOUR OWN RISK. For AC/DC radios it's a safety measure—but for all radios that require an earth ground that can be dangerous in other ways. If you don't know what all of that means, and why, then just don't do it!

6. **AC MAINS VOLTAGE:** Most of the vintage radios such as the club just received were designed for 110 or 115 volt AC mains. The standard in the US today is typically 120 to as high as 125 VAC. When doing initial tests, once a radio has proven it can handle full AC power, I recommend running at the design voltage of 110 or 115, whichever the manual states, at least until all repairs and updates have been done. Some purists will install an auto-transformer behind the more valuable boat anchor radios, and set it for the 110 or 115 VAC. It's your choice and expense—but I've never found that necessary. But one thing to NEVER do that I've seen techs do: blindly turn the auto-transformer "all the way up" thinking that the 120 from the wall outlet will simply pass to the other side. WRONG! Most auto-transformers will deliver up



to 140 VAC on the output, which is enough to cause significant damage to the connected radio.

7. **DISCHARGING CAPS:** Electrolytic filter supply capacitors can hold a serious electrical charge, enough to cause a severe shock to a tech. Properly designed power supplies for old tube gear have what are called "bleeder resistors" that "bleed off" that charge safely to ground when the radio powers off. However, over time, those resistors can fail and there's usually no outward indication. Since there's no way to "see" if the filter caps are charged when beginning a service session, you should always short the positive side of each power supply filter cap to ground using a long insulated screwdriver. Be warned: if the capacitors are charged, there will often be a very loud, rather scary spark and POP as they abruptly discharge to ground this way!! It's easy to recoil in that instant and do damage by banging your hand against something else, just as a reaction. Just be forewarned. REMEMBER that in transmitters and amplifiers especially, this voltage can easily be LETHAL. If you have any doubts whatsoever, "don't do it". Bring in a more experienced ham.

8. **HAND IN POCKET:** One of the first things new hams learned once upon a time that's still 100% valid today when working on HV gear of any kind: Never allow both your hands to be inside touching things at the same time! If you have one hand on ground and your other hand brushes a HV point (even in a radio that's turned off, but the filter caps are still charged), that charge will pass through your chest from one hand to the other and your life is over before you hit the floor. This is nothing to mess with. So always *always* keep one hand in a rear pocket when probing around a HV circuit whether it's live or dead—until you know there is no high voltage present in the chassis. Your unused hand should not leave that pocket lest you touch ground at the wrong instant. Elsewhere in this issue of the bark, in the new "Safety" column, such a story is recounted—where a tech just brushed his arm over a HV tank coil in a transmitter while that arm's hand was touching ground. Thankfully, it was all on one arm so the current didn't pass through his body—had it been from one arm to the other he would have been killed instantly.

REPAIRING AND RESTORING these wonderful old radios can be a delightful experience, with results that can really make your day. There's nothing like being the tech who brings an old receiver or transmitter back to life and puts it back on the air for the first time perhaps in decades. But one small mistake could turn a great day into your last day.

Be watching for future Bark issues where specifics of some of these techniques and "safety tricks of the trade" will be passed along.

Until then, 73

Adam W2NCC

ANTENNA TIME

Notes, tips and projects

By W7UUU

ONE OF THE HARD REALITIES of amateur radio (especially on the HF bands) is that many hams have no choice but to put up a compromise antenna rather than any sort of ideal version. This may be due to HOA restrictions, aesthetics (some hams or their housemates don't want to see visible antennas no matter what), or just plain lack of space.

Sure we'd all like to have a SteppIR beam on a tower and a 160m Marconi up in the trees. But lacking that, what can you do if you have limitations but still want to get on the HF bands?

Operating position for the test –IC-7300 right, switch bay far left

You install a compromise antenna! And these days, there are many to choose from. Not just lots of antenna types but also vast variations between each type. A basic dipole, for example, can take on many forms: flat-top conventional, inverted-vee configuration, inverted-L, or even a vertical! Some can be made very stealthy and perform quite well at the same time.

In this article, we're not going to go down the path of "commercial vs. homebrew" - let's save that for another time. But what we are going to do is show you a video of an actual shootout among eight of the most popular types of compromise antennas for the HF bands.

Why a video and not some highly-technical instrument-driven detailed test? Because many hams just sort of glaze over when you start presenting that level of data.

I wanted the project to result in a final product you can see and hear, with each and every antenna clearly recorded, then trimmed to length with a final viewing time with all of them compared, in less than three minutes!

I put this project together in April 2023 for the sole purpose of directly comparing and contrasting eight different antennas. I felt like we needed something like this to truly help hams figure out which antenna might be best for them—the video is linked on the last page.

For the project, I set up all eight antennas on my 14

ANTENNA TIME

Notes, tips and projects

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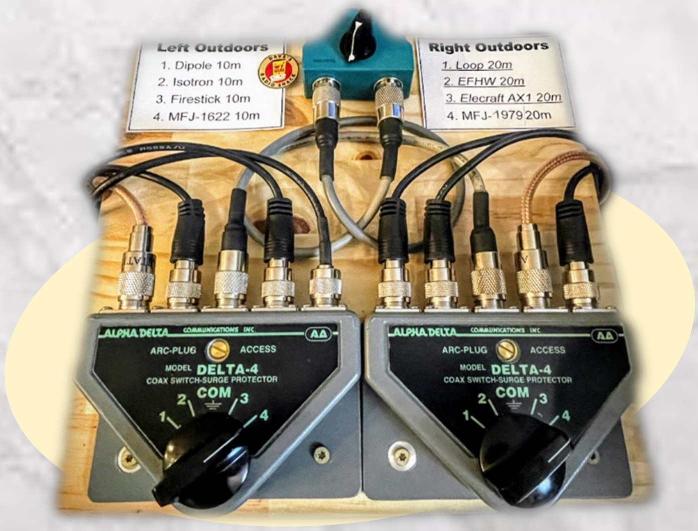
-foot elevated deck facing South & East. I then built up an easy-to-switch ABCD switching system to allow me to quickly jump from one antenna to the next. The event was timed for a major SSB contest weekend, the CQ WPX event—one of the biggest of the year. I chose this contest to be assured of lots of stations to be available in a short time to eliminate as many variables as possible—most notably time of day. I'd be able to work all eight antennas fairly quickly so that propagation changes would be minor, thus ensuring a consistent operating environment for all of the tests.



The 2x4 position swtich array. The blue Daiwa switch selects which bank of Delta switches and thus all 8 antennas can be quickly and easily swapped

Due to many practical reasons, I chose to focus only on the 10 and 15 meter bands (both of which were very open during the 2023 WPX contest event).

So—now let's talk about the antennas chosen for this project. A few I had on hand, such as the homebrew 10m dipole and the MFJ telescoping whip which I use for my POTA activations. All the rest I either purchased new or found on eBay.

In actual switching order on the switch panel:

#1: *Basic 10m dipole.* A dipole is a standard for comparison for many other types of antennas and no such shootout would be proper without one.

#2: *Isotron!* Yes, the (in)famous Bilal Company product that's been around for over 30 years. And yes, the antenna *worked*—but only because it simply makes the transmitter happy and uses the coax shield as the *actual* antenna. But if high enough, that radiating coax shield will make contacts.

#3: *Firestick 10m mobile whip*. This is a common choice—whether Hamstick, MFJ, or Firestick, they are all helically-wound shortened verticals and can do a decent job in the right conditions.

#4: *MFJ-1622 railing, window, or balcony antenna*. It's just a short 66" whip with a base loading coil. Can be very touchy to adjust, needs a coax choke balun which adds to the touchiness, and is a bit of a pain to adjust. Fast band changes are not really possible. But it does work on several bands.

#5: *CARAS Mfg. HF-315 magnetic loop* antenna. Super touchy to adjust (as most loops tend to be) with vanishingly narrow bandwidth. Inexpensive loops like this ($129) almost always need an antenna analyzer to dial in and are *not fast* to change bands.

ANTENNA TIME

Notes, tips and projects

By W7UUU

This is just a partial view of the deck outfitted with the 8 antennas, during initial setup. Surely there was interaction among them but that couldn't be helped.

#6: EFHW "Bugout" antenna from N3VAN. This proved to be the best all-around performer of the lot. But pretty much ALL of the common EFHW antennas would have performed the same. N3VAN has some nice build features. But any decent EFHW will achieve good results. They typically are only for low power however—20-30 watts normally but I ran the N3VAN antenna up to 80 PEP on sideband with no ill effects.

#7: Elecraft AX-1 on 20m only. This is a very compact (think: pocket-size) vertical. The idea is to pair with a tiny radio and go do SOTA and POTA with nothing but your coat pockets carrying stuff. But it's rather delicate. There's a tiny bandswitch (17 & 20m) and it can break easily. Mine fell over in a strong wind, and broke. I had used it the night before so it's in the video then, but it was mostly dead.

#8: Lastly, my trusty MFJ-1979 telescoping whip. Just a basic stainless 16.5 foot steel whip that gets paired with a radial or two for the desired band. Works well with most any tuner, provided you pre-adjust the length of the whip. So it covers 20m up to 6 with just the basic IC-7300 tuner, and will cover all bands with a wider-range tuner. This is my go-to for most POTA activations for the last year or two.

THAT'S THE RUNDOWN of my setup and the 8 antennas. So now settle in, allow yourself 3 minutes of attention, and click the YouTube video picture below and you will see me operate every antenna and what they actually sound like in a real-world situation. Note: in the video, I do them in a different order but it's very clear what's happening.

So what did you think? Pretty amazing, right? At the end of the day, they are *all about the same*! So my final conclusion of this experiment: rather than stress over which compromise antenna performs the best, consider instead what are your mounting options?! And just remember—the loops are *very* narrow tuning! -Dave W7UUU

AROUND THE SHACK & SHOP

Little tips for when you get a round TUIT!

Every ham service shop needs this!

IT'S PROBABLY SAFE TO SAY that most hams have some form of dummy load in their shack or shop for testing radios without putting a live signal on the air. I recently had a chance to use the one pictured below, an XRDS-RF 100-watt PL-259 dummy load that's just a little bit smaller than a 12 ounce can of soda—easily fits in a coat pocket. Frequency range is up to 520 MHz with a VSWR less than 1.2:1.

In testing on an IC-7300 using CW mode, it handled it just fine. Just know: it gets very hot so be careful! Adding a fan extends the time but for short bench tests and portability, you can't go wrong. Click image to see it on Amazon. ■ *-editor*

Upcoming Ham Fests in the area

July 19-21. Glacier Waterton International Peace Park Hamfest. Glacier Meadows Campground, 13 miles west of East Glacier on MT Hwy 2. ***This is an ARRL Sanctioned Event.*** http://www.gwhamfest.org/

July 20. Chehalis Valley ARC Ham Radio Tailgate Swapmeet. ***This is an ARRL Sanctioned Event.*** http://www.cvars.org/

July 20. Coos County Radio Club. Annual Hamfest & Swapmeet. North Bend Oregon. ***This is an ARRL Sanctioned Event.*** **Flyer in PDF.**

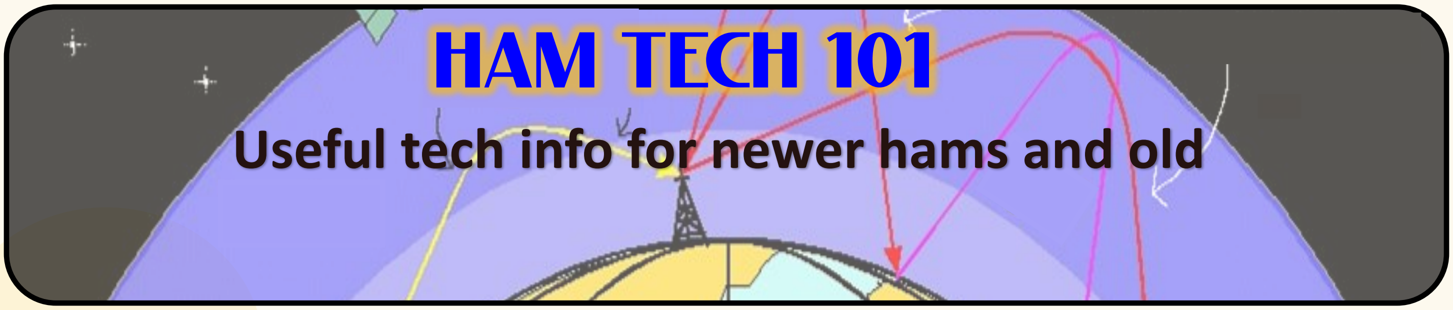
July 20. RARC Swap Meet & Emergency Communication Equipment Display, Richmond, BC. **https://hambone.ca/rac/events/detail.php?event_ID=2360**

August 3. Kootenai Amateur Radio Society (KARS) ARRL Idaho State Convention, Post Falls, ID. ***This is an ARRL Sanctioned Event.*** www.k7id.org

August 9-11. Pacific NW DX Convention. Everett, WA ***This is an ARRL Sanctioned Event.*** https://pacificnwdxconvention.com/

Listings courtesy: Lynn Burlingame www.N7CFO.com

Got a cool shop tip? Send it in!



HAM TECH 101

Useful tech info for newer hams and old

MIC FRIGHT IS A REAL THING!

By Jim Peisker, AF5NP

Mic fright is a general term for anxiety leading to freezing, choking or hesitating when speaking into a microphone (mic). The physiological response of worrying about saying the right thing to an audience large or small is very natural and expected.

Mic fright or shyness is a reality in public speaking, stage performance and similar situations. Of course, it's an important topic to new amateur radio operators so let's provide some perspective and encouragement here.

Making that first voice contact over the radio can be an anxious moment for many new hams. This can also carry over into the first several radio contacts where you worry about saying the right thing and following the rules.

First off, don't let the "rules" make you nervous. It mainly comes down to proper identification which means giving your call sign every 10 minutes during an exchange and at the end of your last transmission (USA rules, other countries vary). That's pretty easy to remember.

Second, every ham was a newbie once and remembers what it was like not knowing exactly what they were doing. Most will be patient and helpful, giving coaching and gentle reminders along the way as needed.

For general phone (voice) contacts, there are no real procedures and formalities to worry about; it's more conversational, much like a phone call. While radio amateurs often use jargon, abbreviation and technical terms (see our Ham-Speak topic), this is not mandatory. Hopefully that takes some of the pressure off to make you more relaxed for your first few contacts.

A starting point for getting on the air the first time is to listen in on the local (VHF/UHF) repeaters and HF SSB bands for a few hours to learn what people say and how they say it. If you follow these examples you are almost certain to be successful when transmitting on your radio.

An excellent way to get past mic fright and performance anxiety is to ease into it with someone in pre-planned fashion on an obscure radio frequency. Get a few casual "practice" contacts in with someone you trust before jumping onto a popular repeater.

Who would this be? Well, it could be your Elmer. You have an Elmer, right? Someone who gives you encouragement, instruction and advice; basically a mentor. They would be the best person to get you on the air the first time and can suggest an appropriate mode, frequency and time to make your first contact or two. A radio exchange or QSO with an Elmer is a low-stress way to get started in ham radio as they can coach and encourage you in real time.

You may also consider doing a pretend contact face-to-face or over the phone, without actually transmitting via radio. This would provide good practice with zero stress.

If you don't have an Elmer or they are not nearby or otherwise available, find a friendly local ham in a club or EmComm group.

Speaking of clubs and EmComm groups, both are likely

HAM TECH 101

Useful tech info for newer hams and old

to have regular formal or informal nets on a local repeater. These nets are a great way for new hams to practice talking on the air and gaining experience without having to say more than a few words. Again, listen in to get a feel for the flow of things before you jump in, although that shouldn't be an issue if you are mic shy.

Now if you're involved in a formal net in an Emergency communications (EmComm) situation, it is advised that you familiarize yourself with the protocol (terms and procedures). Hopefully a real-life EmComm event is not your first taste of speaking on the radio! Don't let it be; get some practice and experience first.

Bottom line, if you are struggling with mic fright, the only way to get past it is get some success under your belt. Start easy with a friend or trusted ham and work into more involved contacts as you gain experience.

Now if mic fright is so real for you that no amount of friendly practice can get you comfortable on air, don't despair. You can still enjoy several modes of communication that are non-spoken. Many hams, particularly on the HF bands, communicate non-verbally over great distances using CW (Morse code), keyboard-to-keyboard using the massively popular FT8 and FT4, or try RTTY, PSK, or even slow-scan TV.

-Jim Peisker, AF5NP

This column is reprinted with permission of Jim AF5NP
from his blog www.NEWHAMS.info
References to FCC question numbers may be out of date but the content will still be accurate

YouTube videos on the topic of Ham Radio Mic Fright!

GEAR

Guest Columnist: Dave Jensen W7DGJ

I REMEMBER MY COLLEGE YEARS in rural Athens, Ohio, and how I used to keep a little fishing kit in the car. It didn't qualify as a rod . . . it was just a few small pieces of bamboo that fit together and then collapsed back into a cardboard tube. While driving to school, this beautiful Ohio countryside would open in front of me like a postcard, and the thought would hit me to skip class and put a line in the water. It was a wonderful feeling to sit on the edge of a small stream and see what I could catch with a worm or beetle, and without any of the gear that I would normally have with me for a day of "serious" fishing.

> *To me, that feeling of sitting on the bank waiting to catch something with very limited resources is quite like the QRP experience.*

Of course, I also love high power operations. From time to time, I need to hear those "really big signal" comments, and to get 10-and-20-over reports. But blasting out a serious Kilowatt or more is very far removed from the pure ham radio thought process of the QRP operator. In fact, when I think of QRP, I remember seeing Japanese Zen gardens on my numerous trips to Japan as a manager for Audio-Technica's US operations.

> *Those beautifully manicured sand-and-stone gardens do a great job of inspiring quiet thoughts and introspection.*

That's how I now view QRP; it is quite the opposite of putting out 1500 watts and slugging away with the big boys and their big antennas. Like many, I was stuck in the world of big signals for years until recently rediscovering the joy of a smaller station. I started my ham life years ago with the QRP mentality . . . small radios, sticking a wire out my bedroom window to receive, and finally when licensed – to jump in with my own shot in the dark to see what I could catch. But over the years my station grew bigger and bigger with no further thought of QRP. That is, until it hit me in the head one day by accident.

I was in my shack doing an intensive round of CW practice one evening. At the time, I was working with the CW Academy in order to move my speed to a higher level. Because I didn't have an oscillator handy, I had cranked up my IC-7300 audio and turned the RF down to *zero* output. I was just listening to myself practice, and doing all kinds of odd things . . . sending CW faster and faster for lines that I came up with in my head, doing the alphabet "scales," or sending select paragraphs off the back of a cereal box. Then, I switched to practicing a CQ repeatedly to see if I could get my call sign firmly entrenched at a dramatically higher speed than my norm. It was frustrating, of course, because I was really stretching and making a lot of mistakes with my code.

That's when the weirdest thing happened. *Someone came back to my CQ!*

I was in shock. How could this be happening? I went back to the transceiver and checked to ensure that I was at zero power and that no RF was being generated. I checked my Daiwa to see if any power was escaping to my antenna and there was zero movement of the needle. But that guy on the other end of the CQ was in California a few hundred miles away,

GEAR

Guest Columnist: Dave Jensen

and he was clearly hearing me. Of course, the problem was that I should have switched over to the dummy load, as something was clearly sneaking past the finals.

The first thing I did, of course, was to apologize for all the weird stuff I had been sending out, and then we had an enjoyable QSO with a normal exchange of QTH and signal reports. When I got off that contact, I sat back and wondered just how much output the ICOM puts out when you have turned your power output setting to zero. I didn't test it, but I'd guess it was on the order of 150-250 milliwatts. That's not much, but it was enough to get me a 579 RST from California that evening!

-Dave W7DGJ

The Author's shack featuring the IC-7300 discussed in this article (center)

ABOUT THE AUTHOR

Dave Jensen, ***W7DGJ****, was first licensed in 1966. Originally* ***WN7VDY*** *(and later* ***WA7VDY****), Dave operated on 40 and 80 meter CW with a shack that consisted primarily of Heathkit equipment. Dave loved radio so much he went off to college to study broadcasting and came out with a BS in Communications from Ohio University (Athens, OH). He worked his way through a number of audio electronics companies after graduation, including the professional microphone business for Audio-Technica. He was later licensed as W7DGJ out of Scottsdale, Arizona, where he ran an executive recruitment practice (CareerTrax Inc.) for several decades. Jensen has published articles in magazines dealing with science and engineering. His column "Tooling Up" ran for 20 years in the website of the leading science journal, SCIENCE, and his column called* ***Trials and Errors: Ham Life with an*** *Amateur continues to be a popular read each month on QRZ.com*

Read Dave's column at:

https://www.qrz.com/trials-and-errors

QRZ NEWS YOU CAN USE

QRZ.com Updates from Dave W7UUU

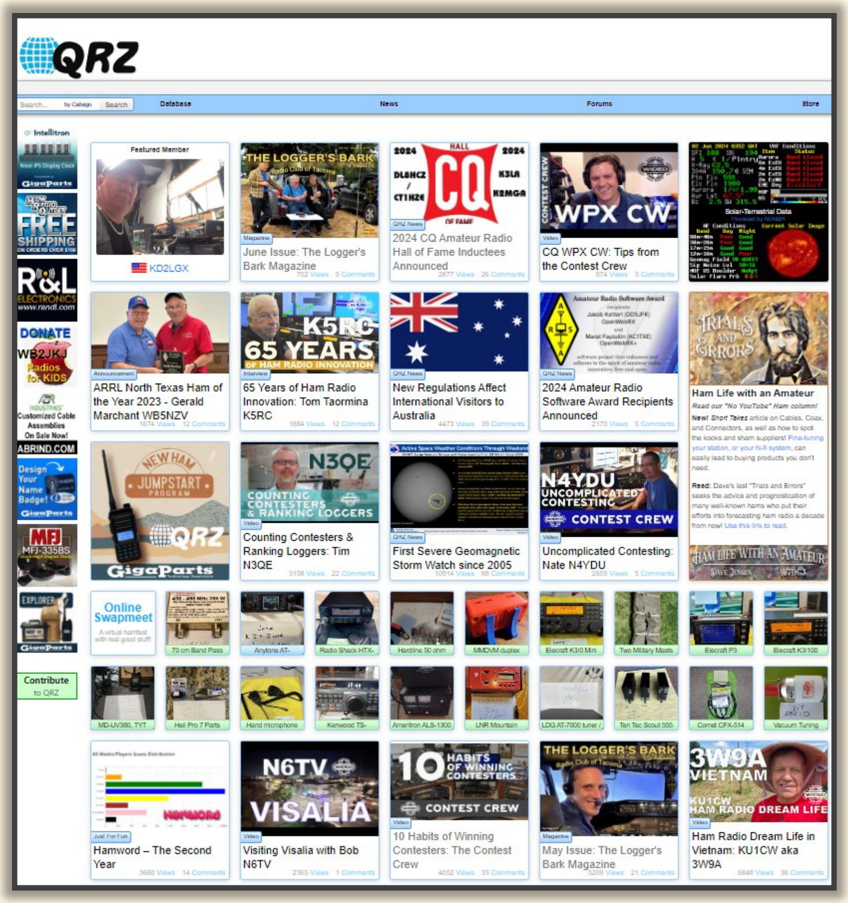
Head Moderator & Director of Forums for QRZ.com

W7UUU

SO HOW EXACTLY DOES QRZ WORK… ?

Is it an HTML website? Is it a database of a million ham radio call signs? Is it a discussion forum? Well, it's obviously all of these things—but probably not in the way most folks might imagine. The site founder, Fred Lloyd AA7BQ, has been a high-level computer and web programmer for many years. When he created QRZ.com, the website as opposed to the CD ROM originally sold with ham call signs in database format, he found there was no pre-made package of software to do all of the things that he envisioned the site to be and do.

So he had to create it. QRZ.com consists of an overall HTML "wrapper" that creates the look and feel for most of the site. But the database system, the forums system, and even the QRZ Trivia Quiz system, among many others, all consist of various software packages—some commercial, some written by Fred himself or by the internal IT engineering team.


QRZ
Database
News
Forums
Store
Featured Member
KD2LGX
June Issue: The Logger's Bark Magazine
2024 CQ Amateur Radio Hall of Fame Inductees Announced
CQ WPX CW: Tips from the Contest Crew
ARRL North Texas Ham of the Year 2023 - Gerald Marchant WB5NZV
65 Years of Ham Radio Innovation: Tom Taormina K5RC
New Regulations Affect International Visitors to Australia
2024 Amateur Radio Software Award Recipients Announced
Ham Life with an Amateur
Counting Contesters & Ranking Loggers: Tim N3QE
First Severe Geomagnetic Storm Watch since 2005
Uncomplicated Contesting: Nate N4YDU
Online Swapmeet
Hamword – The Second Year
Visiting Visalia with Bob N6TV
10 Habits of Winning Contesters: The Contest Crew
May Issue: The Logger's Bark Magazine
Ham Radio Dream Life in Vietnam: KU1CW aka 3W9A
Contribute to QRZ

The database is written in C++ (with some components in other high-level languages) and uses MySQL, Structured Query Language, for the storing and processing of the relational database that holds and serves up the more than one million amateur radio call signs all day every day. There are a number of access points within the QRZ website to gain access to this data, as well as from logging software such as N3FJP, HRD, and many other programs.

The forums software is currently XenForo, one

QRZ NEWS YOU CAN USE

QRZ.com Updates from Dave W7UUU

Head Moderator & Director of Forums for QRZ.com

W7UUU

of the leading platforms for discussion forums on the internet. Even though it is color-coded to match the home page of QRZ and appears to be a seamless extension of the QRZ pages, it is in fact a completely independent software package that has been cleverly melded at the code level into the overall HTML structure of the site.

Many smaller systems and functions on QRZ are also coded software, directly written by Fred or by QRZ IT Engineering Manager Stephen VA7STV (also licensed as MW3EOY in the UK and VE7CJ in British Columbia). An example of this would be the QRZ Trivia Quiz—a daily trivia contest that in fact is one of the more popular sub-features of the site. Coincidentally, I've been the editor of the trivia quiz section of QRZ for a number of years, dealing with updating questions, fixing errors that are found by users, and soliciting new questions from users.

Perhaps the biggest custom-code software package is the very popular QRZ Logbook and Awards system— code written entirely by the QRZ software team… a project that is ever-evolving and has taken years to perfect. The QRZ Awards program is now extremely popular the world over.

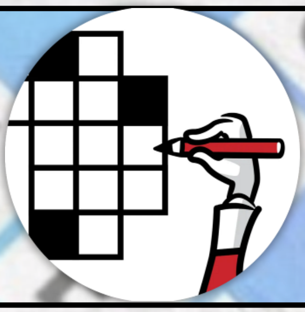
And again, it is designed to match the look and feel of the entire site, so users never feel like they are leaving one application and entering a new one. There are many other sub-systems in use all around the site, most of which were written by Fred or Stephen, and seamlessly integrated into the overall look and feel. Or in some cases, residing invisibly in the background—apps for doing everything from editing advertisement graphics, managing subscriptions, and more than a dozen other functions.

Lastly there is the overall site "user management system" that allows moderators and administrators to keep tabs on all of the subscribers and members—dealing with forgotten passwords, sussing out spammers and scammers, and occasionally managing user bans when necessary. But the goal is simple: keep the user experience such that they never feel they are hopping from app to app—everything looks the same regardless if playing the Trivia game, looking up a call sign, viewing a user's profile page, or applying for operating awards. So that's it for this month…

-Dave W7UUU

FUN AND GAMES!

Crosswords, Word Search, etc.



Find Modern Radio Brands! Print this page to play!

AMERITRON®
BAOFENG
DAEWOO
ELECRAFT
ICOM
KENWOOD
MFJ

D	T	Y	T	E	R	A	P	A	L	I	N	C	O	H	K	U	A	H	H	Y	F	C	E
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P	O	N	V	W	L	C	V	I	E	V	K	L	B	Q	U	B	C	A	F	K	T	V	A
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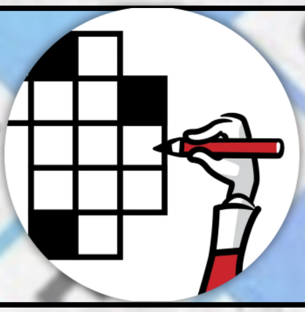
QRP Labs
wouxun®
YAESU
TYT®
XIEGU
ALINCO

RETURN TO HOME PAGE

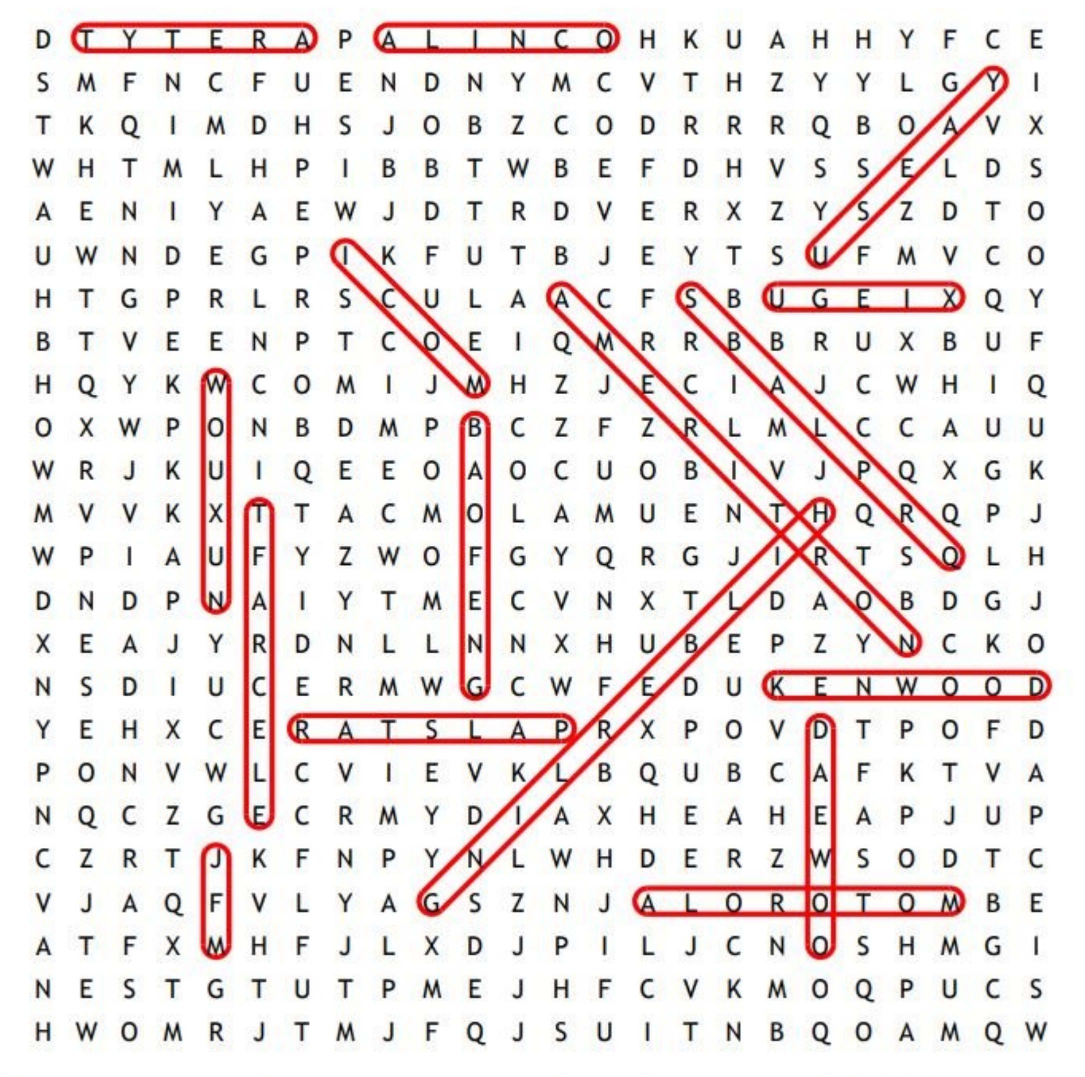
email loggersbark@gmail.com

FUN AND GAMES!

Crosswords, Word Search, etc.



Answer Key… but don't cheat!



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Icom
Xiegu
Tytera
QRPLABS
Kenwood
Ameritron
Daewoo
Wouxun
Yaesu
Palstar
Hilberling
Baofeng
Elecraft

CLOSING REMARKS

W7DK

ABOUT THIS PUBLICATION

The Logger's Bark is the official publication of the Radio Club of Tacoma and is published by RCT, PO Box 11188, Tacoma, WA 98411. The Radio Club of Tacoma is a non-profit corporation as defined by law. All proceeds will be used exclusively for charitable and educational purposes. The Radio Club of Tacoma's Club House is located at 1249 Washington St, Tacoma, WA 98405, phone: 253-759-2040.

EMAILING OFFICERS

To contact any club officer, simply send an email to their call sign @W7DK.org

CONTRIBUTIONS OF ARTICLES & PHOTOS

We WELCOME contributions of articles, guest editorials, blurbs, Hints-and-Kinks, shack photos, QSL cards, memorable contacts, anything of interest to your fellow members. Submit your materials via email to: loggersbark@gmail.com or via US mail to PO Box 11188, Tacoma, WA 98411 Nichrome

RADIO CLUB OF TACOMA REPEATERS

Central Tacoma 2m:	**147.28 + PL Tone 103.5**
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North Tacoma:	**145.21 - PL Tone 141.3**

MEMBERSHIP INFORMATION

- FULL (licensed) and ASSOCIATE (non licensed) membership is $35 per calendar year or $30 for Licensed Seniors (65 and over)
- Licensed family members at same address pay $20 each for the first two and are free for the third, fourth, and so on.
- Full-time students, licensed or non licensed, up to age 25 are $20 per year.
- Fees are applicable for the calendar year: January to December
- Lifetime membership is 20 times the yearly fee you are eligible for. Lifetime memberships are calculated based on the FULL and ASSOCIATE rates. Nichrome
- Visit www.w7dk.org For the latest and most current information on events and activities

MEMBERSHIP APPLICATION

CLICK HERE!

HAVE A SUBMISSION FOR OUR NEXT ISSUE?

loggersbark@W7DK.org

BOARD OF DIRECTORS

Board-approved minutes from the most recent meeting

Radio Club of Tacoma
Board of Directors Meeting Minutes
May 1st, 2024

Meeting called to order at ______1900__________.

Officers and Directors Present

_X__	President	Mike Mikuchonis W7XTZ
_X__	Vice President	Adam Barbera W2NCC
_X__	Secretary	Gary McAdams WG7X
_X__	Treasurer	Steve Dightman AF7YD
_X__	Board	Doug Schafer AB7DG
_X__	Board	Mike Drorbaugh W7MKE
___	Board	Paul Matney W7PFU
_X__	Board	Phil Pia K7PIA
_X__	Board	Red Cranefield WB7EC

NOTE: These approved meeting minutes are reproduced here without any alterations other than to fit the available space, and to redact dollar amounts per Board rules. All language, punctuation, and spelling are exactly as submitted to the editor.

Quorum? __Yes___

Motion for approval of Minutes as previously distributed: Mike W7MKE so Moved; Gary WG7X seconded. Motion approved.

Silent Key or Illness?

None reported.

Secretary's Report (**Gary WG7X)**

Not much to report this month. Almost nothing has come to the mail lately. A couple of bank statements and one QSL card. All state, federal and county property accounts are up to date.

Treasurer's Report (Steve AF7YD)

Steve submitted a Statement of Financial Position (Balance Sheet) a Profit & Loss statement and a couple of other account balances. Chase and US bank are included in this report. Those statements are attached to these minutes. Steve is in the process of shutting down the Chase accounts. He intends to move some of the Chase accounts funds to our new money market accounts. All the accounts are reconciled and recorded in Quick Books.

Steve is concerned that our monthly expenses are increasing to an amount that might impact on our ability to sustain our overhead expenses (Utilities).

Mike W7XH asked Steve AF7YD about yearly budgets. President Mike W7XTZ suggested that we form a budget committee going forward. The budget committee would be separate from the Treasurer and would act to assist the club to set a budget every year. Budgets will / should be submitted in October for the next calendar year. Discussion on this subject covered establishing PayPal accounts and using that to account for membership payments in addition to the budget discussions. This will also be an on-

going task requiring input from IT and membership committees. Much more work is needed to finish this.

Committee / Reports

Membership (Mike W7XH/George K7GRS)

Not much to say about members: Membership is at 318 hams. JBLM is an up-and-coming source of new hams. The VE team will be testing at JBLM on June 14th.

Library (Doug AD7AV)

No report.

Training (Stephan AD7AB)

No report. Next testing will be after this weekend’s session. Tuesday May 7th, 2024.

VE (John AC7WW)

The next scheduled test session is Tuesday May 7th , 2024.

Info Tech and Website (Randy WB4SPB)

All systems are nominal. Randy proposed to create a separate "Volunteer Opportunities for club members" web page, with prominent access directly from the home page. No one has sent in any requests for volunteer jobs. PMT, Assistant treasurer, and program manager are all needed.

Randy has posted a schedule for the station managers for field day. It is going to be turned on via the field day tab on the website.

HF Operations (Phil K7PIA)

Everything in the HF room was reported as working well. They are being used every weekend by club members. State QSO parties are coming up and the 7QP will be of interest to the contest operators at the club. It will run from 0600 to 0000 PST the Saturday, May 4th, 2024.

New equipment still pending is amp and bandpass filters. Band pass filters will ship around the 15th of May and the amp is scheduled to ship on the 20th of May. Ad Hoc training has been given on a case-by-case basis for those folks who are interested in using the new HF station equipment. Folks interested in getting trained just need to work that out with any of the HF committee members.

Tower (Nick K7MO)

Adam W2NCC has scheduled meetings with Nick on the tower grounding. Adam has also arranged with our contractor to do a late July or early August galvanizing. There was some talk about the stand-offs and other hardware that needs to be removed / replaced on the tower. On a related note, Doug AB7DG asked about license renewal for both W7DK and K7MO. No problems with any of that.

BOARD OF DIRECTORS

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Repeater Ops (AL N7OMS)

No report for the BOD: rumor control said that various work parties are in process at the Bates site.

Facilities Management (Adam W2NCC)

Adam is in process with the Roblee alarm upgrades. Monthly fees will cover only the basic alarm system and do not cover the camera monitoring. $*** will be the monthly cost for this service Further reports will be added to this subject as events continue. Adam will be looking for younger volunteers for installation and monitoring the alarm system. Discussion about licensing for monitored alarm systems might be necessary in the city of Tacoma. Discussion continued on this subject with no resolution. Will continue as events warrant.

Adam then discussed the subject of rodents in the clubhouse. No bodies in the traps. So, no real evidence of rats or mice in the clubhouse.

Property Management (Red WB7EC)

PMT DISPOSAL LIST MAY 2024

The Property Management team requests permission from the Board of Directors of the Radio Club of Tacoma to dispose/recycle the following excess items from the PMT collection. $*** was taken in last month from the PMT sales. PMT still needs help.

Motion to allow the PMT to dispose of the equipment listed below. Adam seconded the motion. Motion carried…

1.	RCT 4262	Vibroplex BUG	SN: 124926
2.	RCT 4263	Jones Hand Key/red plastic base	SN:
3.	RCT 4264	Straight Hand key Black metal Base	SN:
4.	RCT 4265	Winslow Straight key Black plastic base J-38	SN: MUSEUM
5.	RCT 4266	Kent Side Wiper Key Brass/Black metal base	SN:
6.	RCT 4267	Straight Hand key, Brass/Red knob	SN:
7.	RCT 4268	Squeeze Key, Brass.	SN:
8.	RCT 4269	Vibroplex Triangle Bug.	SN: 05598 MUSEUM
9.	RCT 4270	MFJ Speech Enhancer MFJ-618	SN:
10.	RCT 4273	Pickard & Burns 600 Watt Dummy Load	SN:
11	RCT 4274	Heathkit HF Amp SB-220	SN: 8236
12	RCT 4275	Hallicrafters HF Receiver SX-99	SN:
13	RCT 4276	Dynaco Dynakit Stero 70A Audio Amp	SN: 6841854
14	RCT 4277	Hallicrafters HF Transmitter HT-37	SN:

15 RCT 4278 Hammarlund HF Receiver HQ-170A SN:

16 RCT 4279 Hallicrafters Keyer HA-1 SN:

17 RCT 4280 National HF Receivers NC-303 SN:

18 RCT 4281 Yaesu XCVR/ Power supply FT-200 SN:

19 RCT 4282 Hammarlund HF Receiver HQ-180 SN:

20 RCT 4283 Johnson Ranger AM Transmitter SN:

21 RCT 4284 Heathkit Warrior HF Amp SN:

22 RCT 4285 Hallicrafters SX-101 HF Receiver SN:

23 RCT 4286 Signalcrafters TSK29B Test set/Box SN:

Museum (Dan KD7SV)

Dan reports the SB301 / 303 parts are on hand to allow completion on the repairs on those receivers. Excess parts donated for the museum were returned to the free table because they were not needed for any current or anticipated repairs.

Dan asked about a spark gap transmitter that is taking up space in the museum should be recycled or moved on to other things. Adam asked about storing this thing in the crawl space in the attic for future use or display.

Dan also asked about the SB-220 or the Heathkit Warrior amps to see if there was any interest in using either of them from club members. If there were, Dan could check out amp(s) if anyone wants them and then they could be released for sale via the PMT usual route.

Wednesday Workshop (Randy WB4SPB)

Field training session covering logging and hands-on operation. Fourth Wednesday at the clubhouse S&P training. Randy will need some assistance from the experienced operators to act as remote stations to be calling CQ for the others to call back and log.

General Meeting (Dave W7UUU)

Dave reports restoration Guru Steve Reed, KW4H, has agreed to present at the May General meeting his program on just what it means to "repair" a radio vs. "restore" a radio, and there's a pretty big difference. He's one of the best radio restoration guys out there today, with a program he's given to other clubs. Should be interesting. Dave is still looking for someone to take this job over.

Unfinished Business

Out of Area membership fee: Adam is considering adding a non-member type membership that would support the club’s outreach abilities. It was suggested that we use the unlicensed associate membership

BOARD OF DIRECTORS

Board-approved minutes from the most recent meeting

W7DK

type already in to rules for this membership type. It was suggested by Adam that the cost for this should be $20 a year.

Adam made a motion to set the associate membership dues to $20. Motions seconded by Mike W7MKE Discussion continued. Doug Schafer noted that the associate member type is already outlined in the standing rules. Motion carried.

Field Day discussion by Mike Drorbaugh W7MKE.

Dates to remember: June 8th at Dave W7UUU's house. Set up of rocket launchers will be covered during the live training at Dave's house.

FD 2024 VOLUNTEERS (so far 5/1/24)

STATION MASTERS
80/15 Dan Vacanti KD7SV Flex 6500
40MEllen Hardin AI7FP Flex 6400M
20MMike Mikuchonis W7XTZ IC-756 Pro III
10MGary McAdams WG7X IC-7410

ROCKET LAUNCHER CREW
Dan Vacanti KD7SV Lead
David Asher W7GEL
Evan Moyer KI7ZEW
Paul Nosal N7OSS
Kerry Harris KI7LTV
(Joe Kubistek KG7ZYB)
(Manny Adonis AB7MA)
(Nic Adonis KK7MHZ)
() = not for sure

SAFETY OFFICER
Doug Schafer AB7DG

LOGGING/NETWORKING
Randy Myers WB4SPB

PUBLICITY/PROMOTION
Deanna Jenks KA7DCX

KITCHEN

BOARD OF DIRECTORS

W7DK

Board-approved minutes from the most recent meeting

Paul Matney WPFU
Red Cranefield WB7EC
(Jan Gilbertson K7HTU)

ANTENNA ASSEMBLY
Steve Dightman AF7YD
Others ??

TENT SETUP
? Doug Reynolds K7FDR ?
Others ??

TRANSPORTATION
??
Tabled for discussion at the meeting at Dave's house. We still need microphones and foot switches and possibly a power supply. Doug Schafer will be our Safety Officer. Deanna Jenks Promotion and PR Steve Dightman wants to tune the 10 & 15 meter beams. He will also need an antenna crew to help with getting the antennas on the rocket launchers. Three rocket launchers will be used with a mono-band antenna on each one for the three upper HF bands. Discussion ensued about the big 40-meter dipole / yagi combination. We are trying to simplify it as much as possible and the entire antenna is a bear to set up and uses a lot of space for very little return.

Usual kitchen crew and set up. Also, will need the usual crew for setting up tents, tables and chairs.

Meeting places?

President Mike W7XTZ and Director Mike W7MKE have been looking for suitable places to hold general meetings. They will make an informed decision when they go through the current listed locations. Mike W7XTZ also reports that it looks like the Administrative Center meeting rooms are no longer available.

They are listed here:
13718 Pacific Ave. S.
Tacoma, WA 98444

6300 Wildaire Road S.W. Lakewood, WA 98499. The library in Lakewood is currently under construction with the planned ready date sometime this summer. It looks small just judging from the foundations that are there now. Looks like they started construction in earnest this last week though. Still looks small to me, but who knows? Appearances can be deceiving.

3609 Marketplace W., Suite 100

University Place, WA 98466

5107 112th St. E.
Tacoma, WA 98446

Adam also reports that he has been looking at various sites and the "Golden Eagles" club on 76th & Pine Street seems to be good. They have the second Saturday available for us at $175 per month. They meet all the criteria for what we want / need.

Adam W2NCC then led a discussion about moving the clubs General meeting to the second Saturdays of the month. Much discussion on this in addition to the original site's discussion.

Discussion tabled again for more input.

SeaPac table. Adam W2NCC has a table available and available for the members to use along with him. In addition, RCT will also have a table, plenty of opportunity to sell some stuff.

New Business?
We received some communications from Tacoma's Landmarks Preservation Commission.

Posted below:

On 04/22/2024 8:20 AM PDT Michael Lafreniere <info@historictacoma.org> wrote:

Mr. Mikuchonis,
FYI, in case you haven't heard by now, it is my understanding that our nomination of the Radio Club for a Historic Preservation Award was approved recently by the City Landmarks Preservation Commission. According to the City's website, *"Award winners will be honored at an in-person reception and ceremony on Thursday, May 23, 2024. More details on the location and time will be released soon."*

Mike W7XTZ Responds:
Mr. Lafreniere, once again thanks for the information. Our board has not yet met to discuss this. We will certainly consider the Landmarks Preservation Commissions' offer at our meeting the beginning of May.
Mike Mikuchonis W7XTZ.

Activity Reports, Discussion Topics, Announcements.

BOARD OF DIRECTORS

Board-approved minutes from the most recent meeting

Randy, WB4SPB, sent this along to us:

Hi Mr. Secretary, & Club members.
Here is some correspondence you can mention at a future meeting if you like. I have replied to thank Dr. Mario for his greeting.
73, Randy
Hello,
Mario, KD6ILO, a former club member of W7DK from 1993-2009. Just wanted to say hello to all at the "Clubhouse". W7BUN, Jerry, was a mentor of mine as well as many others. Cheers and Aloha!

-- Dr. Mario --

San Diego DATV Society Carlsbad Studio|Labs California USA

KD6ILO™LABS
ATSL 1550 Laser Optic Network

Adjournment at:_______2112___________________

Gary McAdams, WG7X
Secretary, Radio Club of Tacoma
W7DK.org

BOARD OF DIRECTORS

Board-approved minutes from the most recent meeting

ATTCHMENTS:

RADIO CLUB of TACOMA
ATTENDANCE SHEET
Monthly Meeting
May 1st, 2024

	NAME	**CALLSIGN**	**RCT NUM**
	ATTENDED at Clubhouse	Only non BOD members BOD at top of minutes.	Applies to ZOOM and at clubhouse.
1	Paul Nosal	K7OSS	2530
2	David Stilwell	AC7KP	2073
	Attended via ZOOM		
1	Randy Meyers	WB4SPB	2050
2	David Ashley	W7GEL	2987
3	Dan Vacanti	KD7SV	2640

END of REPORT

RETURN TO HOME PAGE

GENERAL MEETING

Board-approved minutes from the most recent meeting

Radio Club of Tacoma
General Meeting minutes
May 8th,2024

Meeting called to order at _______1900_________.

Officers and Directors Present

_X__	President	Mike Mikuchonis W7XTZ
_X__	Vice President	Adam Barbera W2NCC
_X__	Secretary	Gary McAdams WG7X
_X__	Treasurer	Steve Dightman AF7YD
___	Board	Doug Schafer AB7DG
_X__	Board	Mike Drorbaugh W7MKE
_X__	Board	Paul Matney W7PFU
_X__	Board	Phil Pia K7PIA
_X__	Board	Red Cranefield WB7EC

NOTE: These approved meeting minutes are reproduced here without any alterations other than to fit the available space, and to redact dollar amounts per Board rules. All language, punctuation, and spelling are exactly as submitted to the editor.

Meeting Called to Order at: 1900 LOCAL.

Flag Salute, Led by: Secretary Gary WG7X

Quorum (10% of membership required to "conduct business. __No___

Welcome and Acknowledgement of New Members and Visitors (Please introduce yourselves)

Kathryn Antonetti K7USR brought in a friend who will be taking the General test soon. Did not get the visitor's name.

General Meeting (Dave W7UUU)

Dave reports restoration Guru Steve Reed, KW4H, has agreed to present at the May general meeting his program on just what it means to "repair" a radio vs. "restore" a radio, and there's a pretty big difference. He's one of the best radio restoration guys out there today, with a program he's given to other clubs. It was an interesting talk about restoration vs repair.

Silent Key or Illness?

Al Burleson K7HW is having various medical problems that are keeping him in rehab. Dan KD7SV is also aware of this. The latest info from membership indicates that he is now back home as of Thursday, May 9th 2024.

Manny Adonis' father-in-law recently passed away. Dan KD7SV is aware and condolences to his family from the Radio Club of Tacoma.

Steve Blacksten AD7VL is still going through stage 4 cancer. Dave W7UUU is working on his video for the club members living history program that he (Dave) does.

Secretary's Report (**Gary WG7X)**

Not much to report this month. Almost nothing has come to the mail lately. A couple of bank statements and one QSL card. All state, federal and county property accounts are up to date.

Treasurer's Report (Steve AF7YD)

GENERAL MEETING

Board-approved minutes from the most recent meeting

W7DK

Steve AF7YD submitted a Statement of Financial Position (Balance Sheet), a Profit & Loss statement and a couple of other account balances at the BOD meeting. Yearly budgets were also discussed. Steve says we do have money, but it is dwindling. Expenses over income have been in $*** region mostly due to outstanding HF equipment that is getting ready to ship. Steve has corrected the $*** error that was shown in his Quick books program and has straightened out all that. It is now correct. Our money market account is in place and making money. Steve has also set up a Paypal account for Mike Isakson in the membership committee that will allow folks to use electronic forms of payment.

President Mike W7XTZ brought up the subject of budgets. This was discussed at the May BOD meeting, and we (W7DK committees) will be submitting budgets in future in October for the next calendar year. Steve mentioned that he started doing treasurer in 2017 and all those years we did not have budgets. Now that have established budgets, we have spent more money than we did before. But we also have more income now than we have had in the past.

Steve AF7YD went on to mention good news in the promotion of RCT in QRZ and other places that might result in revenues.

David W7GEL mentioned possible income sources (Benevity). This is on Steve's plate already.

Committee / Reports

Membership (Mike W7XH/George K7GRS)

All systems nominal. Membership is 320 hams. President Mike mentions that membership has a goal of getting 400 new members into the club. The VE team will be testing at JBLM on June 14th.

Library (Doug AD7AV)

No report.

Training (Stephan AD7AB)

No report. Next testing will be after weekend's session. Tuesday May 14th, 2024.

VE (John AC7WW)

The next scheduled test session is Tuesday May 14, 2024.

Info Tech and Website (Randy WB4SPB)

All systems are operating within normal operating parameters. Randy showed us a new search ability for searching through the online Loggers Bark issues. Only available if logged onto the website.

HF Operations (Phil K7PIA)

Everything in the HF room was reported as working well. Contest last weekend: W7DK operated in last weekend's 7QP. Some good contests are coming up: see WA7NBM contest calendar. N5J Jarvis Island coming up in August. We have new equipment in the HF station upstairs. Everyone should come up and see how it looks and works. Anyone who wants to learn how to operate the new equipment need only to let an HF committee member know and they will help you out.

GENERAL MEETING
Board-approved minutes from the most recent meeting
W7DK

VHF/UHF is available for emcomm or weak signal work as usual.

President Mike asked Randy WB4SPB what station he would use for CW operations. Randy expressed no preference, except for stuff in the museum. President Mike was trying to make sure that we did not show favoritism toward SSB or FT8 operations.

Tower (Nick K7MO)

Adam W2NCC has scheduled meetings with Nick on the tower grounding. Adam has also arranged with our contractor to do a late July or early August galvanizing. Harrington Arial (contractor) will update us with a schedule soon.

Repeater Ops (AL N7OMS)

No report: Although rumor control said that various work parties are in process at the Bates site. Al reports that work continues the system.

Facilities Management (Adam W2NCC)

Adam is in process with the Roblee alarm upgrades. Adam will be looking for volunteers for installation and monitoring the alarm system. Late May a possible work party is to be established for various projects around the clubhouse. Dave AC7KP and Leonard KA7NWF are thanked for doing the landscaping around the clubhouse.

Adam then discussed the subject of rodents in the clubhouse. No bodies in the traps. So, no real evidence of rats or mice in the clubhouse.

Property Management (Red WB7EC)

PMT DISPOSAL LIST MAY 2024

The Property Management team requests permission from the Board of Directors of the Radio Club of Tacoma to dispose/ recycle the following excess items from the PMT collection. $*** was taken in last month from the PMT sales. PMT still needs help.

Last Saturday we received a huge donation of boat anchors that PMT still need triage. Red reminds us that most of this stuff is very heavy. (They're not called boat anchors for no reason)! Daniel Hudson WA7HTP sk was the donor. Red hopes to have an initial list ready soon. Saturday's load was only the second one, more is apparently on the way.

The PMT will be disposing of the equipment listed below.

1.	RCT 4262	Vibroplex BUG	SN: 124926
2.	RCT 4263	Jones Hand Key/red plastic base	SN:
3.	RCT 4264	Straight Hand key Black metal Base	SN:
4.	RCT 4265	Winslow Straight key Black plastic base J-38	SN: MUSEUM
5.	RCT 4266	Kent Side Wiper Key Brass/Black metal base	SN:
6.	RCT 4267	Straight Hand key, Brass/Red knob	SN:
7.	RCT 4268	Squeeze Key, Brass.	SN:
8.	RCT 4269	Vibroplex Triangle Bug.	SN: 05598 MUSEUM

GENERAL MEETING

Board-approved minutes from the most recent meeting

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9.	RCT 4270 MFJ Speech Enhancer MFJ-618	SN:
10.	RCT 4273 Pickard & Burns 600 Watt Dummy Load	SN:
11	RCT 4274 Heathkit HF Amp SB-220	SN: 8236
12	RCT 4275 Hallicrafters HF Receiver SX-99	SN:
13	RCT 4276 Dynaco Dynakit Stero 70A Audio Amp	SN: 6841854
14	RCT 4277 Hallicrafters HF Transmitter HT-37	SN:
15	RCT 4278 Hammarlund HF Receiver HQ-170A	SN:
16	RCT 4279 Hallicrafters Keyer HA-1	SN:
17	RCT 4280 National HF Receivers NC-303	SN:
18	RCT 4281 Yaesu XCVR/ Power supply FT-200	SN:
19	RCT 4282 Hammarlund HF Receiver HQ-180	SN:
20	RCT 4283 Johnson Ranger AM Transmitter	SN:
21	RCT 4284 Heathkit Warrior HF Amp	SN:
22	RCT 4285 Hallicrafters SX-101 HF Receiver	SN:
23	RCT 4286 Signalcrafters TSK29B Test set/Box	SN:

Museum (Dan KD7SV)

Dan KD7SV reports the SB301 / 303 parts are on hand to allow completion of the repairs on those receivers. Dan updated the AC cord on the SB303. The VFO is stuck, and Dan will be working on clearing the dry grease out of this VFO. Gary WG7X offered the use of his Ultrasonic cleaner. This will be tried next Saturday.

Dan asked about the SB-220 or the Heathkit Warrior amps that are presently in the lockup to see if there was any interest in using either of them. If there were, Dan could check out amp(s) if anyone wants them, and they could be released for sale by the PMT.

Wednesday Workshop (Randy WB4SPB)

Field training session covering logging and hands-on operation. Fourth Wednesday at the clubhouse S&P training. Randy will need some assistance from the experienced operators to act as remote stations to be calling CQ for the others to call back and log. Gary WG7X offered to be one of the "DX" operators.

Unfinished Business.

President Mike asked the group again about how we need a new program director and an assistant Treasurer.

Out of Area membership fee: Adam W2NCC is considering adding a non-member type membership that would support the club's outreach abilities. This was discussed at the May BOD and we decided to just change the already available Associate membership to a lower cost non-voting membership. The cost decided on is $***. The non-voting associates would be out-of-state…

Discussion moved into a discussion of having a Special Board meeting on the dues structure of the associate membership and the move of the general meeting to the second Saturday of the month. Meeting will the Saturday the 18th of May at the clubhouse and via Zoom as usual at 1100 local.

GENERAL MEETING

Board-approved minutes from the most recent meeting

W7DK

Field Day discussion by Mike Drorbaugh W7MKE.

Dates to remember: June 8th at Dave W7UUU's house. Set up of rocket launchers will be covered during the live training at Dave's house.

FD 2024 VOLUNTEERS (so far 5/7/24)

STATION MASTERS: We'll have a 4A operation.
80/15 Dan Vacanti KD7SV Flex 6500
40M Ellen Hardin AI7FP Flex 6400M
20M Mike Mikuchonis W7XTZ IC-756 Pro III
10M Gary McAdams WG7X IC-7410

ROCKET LAUNCHER CREW: 3 rocket launchers to setup.
Dan Vacanti KD7SV Lead
David Asher W7GEL
Evan Moyer KI7ZEW
Paul Nosal N7OSS
Kerry Harris KI7LTV
Joe Kubistek KG7ZYB
Jeff Winget KK7PJR

SAFETY OFFICER
Doug Schafer AB7DG

LOGGING/NETWORKING: Practice May 23 at RCT.
Randy Myers WB4SPB

PUBLICITY/PROMOTION
Deanna Jenks KA7DCX

KITCHEN
Paul Matney WPFU
Red Cranefield WB7EC
(Jan Gilbertson K7HTU)

ANTENNA ASSEMBLY: 10, 15, 20M Yagi-Udas.
Steve Dightman AF7YD
Randy Rumley KK7RHL
Jordan W3NTA

GENERAL MEETING

Board-approved minutes from the most recent meeting

W7DK

TENT SETUP
Doug Reynolds K7FDR
John Wheeler KA7RMG
John Buonora KJ7SJM
David Stilwell AC7KP

TRANSPORTATION
Brad Cullen WA7BTC
Mike Drorbaugh W7MKE

Tabled for discussion at the meeting at Dave's house. We still need microphones and foot switches and possibly a power supply. Doug Schafer will be our Safety Officer. Deanna Jenks Promotion and PR Steve Dightman wants to tune the 10 & 15 meter beams. He will also need an antenna crew to help with getting the antennas on the rocket launchers. Three rocket launchers will be used with a mono-band antenna on each one for the three upper HF bands.

Usual kitchen crew and set up. Also, will need the usual crew for setting up tents, tables, and chairs. Discussions continued on various subjects relating to field day operations. Most of these will be discussed during the month of May. When the internet went out, we lost a lot of folks so this discussion will be repeated in person with the folks who are interested in field day. Please contact Mike Drorbaugh W7MKE for open positions or questions on field day.

Meeting places?

President Mike W7XTZ, Vice President Adam W2NCC and Director Mike W7MKE have been looking for suitable places to hold general meetings. At the Wednesday board meeting we reviewed changing the general meeting location and moving the general meeting to the second Saturday of the month. Venue research from W2NCC, W7XTZ and W7MKE was shared with the board.

During the meeting it was mentioned that the Environmental Services building, University Place, has a meetings room that could be rented. Adam W2NCC called the Environmental Services and asked about renting their meeting room. There is a minimum of 6 hours and the weekend rate is 2100.00. This is a no-go..
As discussed at the board meeting, the Eagles Club on Pine St. is the best value at 175 per month. Adam said that he felt that moving the general meeting on Saturday to a place that can comfortably seat more people will directly contribute to membership growth.

Adam would like to make a motion via email.

Adam's motion, that the club move the General meeting to the second Saturday of the Month. Also, move

GENERAL MEETING

Board-approved minutes from the most recent meeting

W7DK

the meeting to the Eagles Club on Pine St. The cost is 175.00 for the second Saturday of the month and we purchase for 12 months.
Note: We as a board can review this direction in early 2025 and see if this makes sense to continue or make different arrangements.
Thank you, Adam W2NCC

Steve, AF7YD says: RCT BOD, I am making the Second to Adam's motion of 5/7/2024, to move the General Meeting to the Eagles Club on Pine St.

I see this as an experiment to see how we can do to attract increased attendance to our General Meeting. Having quality speakers and food should make for an attraction force. It will take some time to get the momentum shifted for the Sat meetings, but we can all talk this up and help move it along.
73, Steve AF7YD

SeaPac table. Adam W2NCC has a table available and available for the members to use along with him. In addition, RCT will also have a table, plenty of opportunity to sell some stuff.

New Business?

We received some communications from Tacoma's Landmarks Preservation Commission. This concerns an award from Tacoma's City Landmarks Preservation Commission.

The RCT is apparently up for an award for keeping the clubhouse in good condition for so many years. Dr. Oakman is going to the award ceremony and will update us afterwards.

Activity Reports, Discussion Topics, Announcements.

None reported.

Adjournment at:_______2115___________________

Gary McAdams, WG7X
Secretary, Radio Club of Tacoma
W7DK.org

GENERAL MEETING

Board-approved minutes from the most recent meeting

W7DK

ATTCHMENTS:

RADIO CLUB of TACOMA
ATTENDANCE SHEET
Monthly Meeting
May 8th, 2024

	NAME	CALLSIGN	RCT NUM
	ATTENDED at Clubhouse	BOD members and officers listed at top of minutes.	Applies to ZOOM and at clubhouse.
1	Leonard Burstiner	KA7NWF	2308
2	Kathryn Antonetti	K7USR	2721
3	Jeff Winget	KK7PRJ	3110
4	David Ashley	W7GEL	2987
5	Sam Mulvey	N9MII	2786
6	David Stilwell	AC7KP	2073
7	Jeff Eveland	KJ7FSV	3093
8	Mike Isakson	W7XH	2657
	Attended via ZOOM		
1	Randy Myers	WB4SPB	2050
2	Dave Ellison	W7UUU	743
3	Dan Vacanti	KD7SV	2640
4	Steve Reed	KW4H	Visitor
5	Bruce Hanson	WE7P	2382
6	Whit Worcester	KG7LNZ	2677
7	Mike Hancock	AJ7MH	

END of REPORT

SPECIAL BOARD OF DIRECTORS

Board approved minutes from the most recent Special BOD Meeting

Radio Club of Tacoma
BOD Barkie Meeting Minutes
May 18th, 2024

NOTE: These approved meeting minutes are reproduced here without any alterations other than to fit the available space, and to redact dollar amounts per Board rules. All language, punctuation, and spelling are exactly as submitted to the editor.

Meeting called to order at ______1109__________.

Officers and Directors Present

_X__	President	Mike Mikuchonis W7XTZ
_X__	Vice President	Adam Barbera W2NCC
_X__	Secretary	Gary McAdams WG7X
_X__	Treasurer	Steve Dightman AF7YD
_X__	Board	Doug Schafer AB7DG
_X__	Board	Mike Drorbaugh W7MKE
_X__	Board	Paul Matney W7PFU
___	Board	Phil Pia K7PIA
___	Board	Red Cranefield WB7EC

Quorum? __Yes___

Topics for a special RCT BOD Meeting 5/18 at 11:00 am held at the clubhouse and via Zoom.
Adam made a motion; that the club move the General meeting to the second Saturday of the Month. Also, move the meeting to the Eagles Club on Pine St. The cost is 175.00 for the second Saturday of the month and we purchase for 12 months.
Motion was seconded by Steve Dightman AF7YD
Discussion ensued with the members present as to why RCT needs a larger venue to accommodate the membership that traditionally appeared at General Meetings before covid. Mike Drorbaugh added the inclusion that the meetings needed to be during the day due to our members generally not liking to drive at night. He also mentioned the Arie in question has food service in addition to the meeting rooms. 7037 S. Pine Street, Tacoma is the address of the Eagles Arie that we are considering. We are looking at 1200 to 1500 local on Saturdays.
Adam then presented some data about Benevity and their possible grants to the club for meetings. Steve expounded a bit on the Benevity account that would put as much as $500 into us immediately, with approximately $800 going forward into next year.
Treasurer Steve AF7YD gave us further advice about the already existing balances that we have with Benevity.
Discussion amongst the board members carried on for a while before President Mike called for a vote.
Motion called By Mike Drorbaugh W7MKE. President Mike Mikuchonis W7XTZ called for a voice vote; motion carried.
Ellen asked about the “field day pig”: we gave her and the assembled members a short history lesson on meetings at the club. We would expect that membership attending meetings would grow to fill the venue just as it did in the past.

SPECIAL BOARD OF DIRECTORS

Board approved minutes from the most recent Special BOD Meeting

W7DK

The second item is a discussion about rate changes to the category of Associate Members.
Due to increased readership of the Logger's BARK via QRZ it is possible to obtain new members if an attractive rate can be offered. At the May BOD meeting the board reduced the rate for associate members from $*** down to $***. Later, it was thought that the $***rate might encourage local members to go to that category. So, motion was modified to the below:
Mike W7MKE moved to make the rates for associate members be $* as it is now for those living in Thurston, Pierce, King, Kitsap, Mason, and Snohomish counties and $*** for those outside of those counties.**
Seconded by Adam.
Discussion ensued. Sam N9MII asked about better definition of the association members to just out of state membership, but that would require a rewrite of the standing rules.
Mike W7XH discussed differences between in-state and out of state membership categories. No hard decisions were made at this meeting.
Doug AB7DG. asked about Pierce and adjacent counties as the definition of the coverage area for the associate members. Doug also asked about sites to best download the newsletter. Dave W7UUU described the process thru QRZ versus downloading the entire newsletter from our site. Adam W2NCC told us about how he is advertising our newsletter on "Craig's list".
Further discussion on the idea of making the QRZ / Barkie a fund generating operation ensued. Various ideas surfaced, with no particular need to modify the motion listed above.
President Mike W7XTZ called for a vote; motion carried…
Meeting Adjourned at: 1145
Secretary, Gary WG7X
Attachment: Attendance list.

SPECIAL BOARD OF DIRECTORS

W7DK

Board approved minutes from the most recent Special BOD Meeting

RADIO CLUB of TACOMA
ATTENDANCE SHEET
Special Barkie Meeting
May 18th, 2024

	NAME	**CALLSIGN**	**RCT NUM**
	ATTENDED at Clubhouse	Officers Listed at top of these minutes.	
1	Ellen Hardin	AI7FP	2953
2	Warren Angus	NG7G	2707
3	Manny Adonis	AD7MA	3028
4	Dave Ellison	W7UUU	743
5	Dan Vacanti	KD7SV	2640
6	Bruce Hansen	WE7P	2382
7	Paul Nosal	K7OSS	2530
8	Mike Isakson	W7XH	2657
9	Sam Mulvey	N9MII	2786
10	(via ZOOM) Leah Ives	K7IPT	3096

END of REPORT